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THE ROUND WORLD

AN ELEMENTARY GEOGRAPHY

BY

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PREFACE

THIS book is written for a class which has a knowledge only of the Homeland and of a few general geographic phenomena, such as deserts and forests.

The aim is to widen the outlook at once to take in the Globe, to consider the continents as sections of the Globe, and to lay stress on world conditions of climate.

The method is twofold. On the one hand, each section is introduced by a short sketch from the historic point of view, and works on to a conclusion with an economic basis, this being done extremely simply, to keep in touch with the human side of the subject. On the other hand, a logical order is adopted in treating the physical aspect of each section, so that the final dependence of men on a few simple interacting 'causes' may be brought home by iteration.

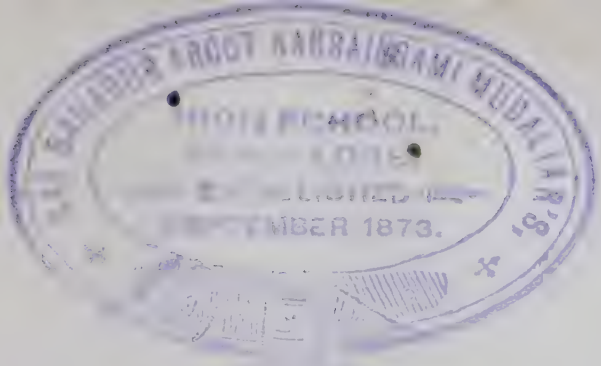
But the continents are not treated alike. There is a progressive sequence of ideas. South America, the simplest in structure, is taken first to illustrate simple physical facts of uplift and the general ideas of winds, rain, and temperature. In North America, besides other advances, there is added the

consideration of the seasonal change of temperature and the results that follow. In Africa the new idea of the seasonal change of rainfall, and in Asia the new idea of the reversal of the winds, are introduced, while the various other important geographic conditions which have brought about the importance of Europe are briefly referred to. Australia is used as an exercise on what has already been learned.

The book is written, also, so that it may be gone over in a year of three terms, taking two sections each term. The second and third pairs of sections are each rather shorter than the preceding pair, this arrangement allowing for revision of what has gone before, because that revision is essential to the understanding of the whole.

It is scarcely necessary to say that the book presupposes oral teaching, physical maps, and, if possible, a globe. There is plenty of room for illustration of all kinds, pictorial and otherwise, but here there is a text for the oral teaching, and a complete résumé of that oral teaching, in a form convenient for revision.

J. F.



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THE ROUND WORLD

AN ELEMENTARY GEOGRAPHY

Sailing Round the World.

You have learned about this land of England in which we live ; you know that from its south-east corner—that is, from Dover—on a clear day people can just see the coast of France twenty miles away across the water, and that on a clear night the flashes from the lighthouse at Cape Grisnez can be easily seen on the English side of the Channel.

This part of France is the nearest land to the British Isles ; there is no other foreign land which can be seen from any place in England or Scotland, or Ireland or Wales. But, though we cannot see it from our lands, we know that all along the other side of the English Channel is the coast of France ; we know that just south of the peninsula of Cornwall is another peninsula in France, and that away west of Cornwall and France is a great stretch of ocean.

For many hundreds of years no one dared to go to see how far this ocean stretched, and no one knew what was beyond. However, at last Columbus dared

to go straight across it, and he came to some land that no one had ever even heard of before. When once he had sailed across this Atlantic Ocean, other men were not so much afraid, and numbers of people sailed across it too, some in one direction, some in another ; but in whatever direction they went, they always found land. By the time of Queen Elizabeth, one hundred years after Columbus, it was known that across this Atlantic Ocean there was another continent—America.

It was known, too, that beyond this land of America there was still another ocean. Drake, one of the great captains in Queen Elizabeth's time, had even seen it. He had come to a very narrow part of the American land, and from the top of a tree to which he had climbed, far away, as far away as he could see, he had seen this new ocean lying quiet in the sunlight. He came back to England, and made some ships ready to go to find out all about it. He sailed away from Plymouth in the middle of November, but he found the winds so much against him that he did not really get away from the English Channel till the middle of December. Then he fared better, for by Christmas Day he had reached the North of Africa. He spent a month in Africa, and then set sail across the Atlantic. He did not go quite straight across, for he knew that all along the other side was land ; so he sailed away south as well as west. The wind was blowing from behind him all the time, so he went quite fast for those days. As he sailed southward, it grew hotter and hotter ;

the sun was nearer and nearer overhead at midday. One day it was exactly overhead, and the next it was a little to the north instead of to the south, as it is with us. After that the heat grew less. In the beginning of April, two months after leaving Africa, he and his men saw the land, and sailed slowly southwards along it. They did not go so fast as before, because the wind was now rather against them.

When it became much colder, they decided to rest for a while, so that it was not till the beginning of September that they found a narrow strait that allowed them to sail through to the west. A Spaniard called Magellan had sailed through it before Drake, so it is called Magellan Strait. They just got through, and then very bad storms came on—so bad that for two months they could go no farther, but were actually blown away back to the south-east, past a great many islands to the south of the strait, and they may even have seen the very farthest south of these islands, on which is Cape Horn.

When they did begin to go northward along the coast, Drake and his men began to find Spanish ships and fight with them. The Spaniards had come to that narrow part of the land even before Drake had done so. Balboa, the first of them who had crossed over to the other side, had seen the ocean beyond, as Drake saw it afterwards, shining and quiet, and had called it the Pacific, or 'quiet,' Ocean. Then Spaniards had crossed right over to this Pacific Ocean, and built ships on it, and had been able to sail long distances up and down the coast. Drake

sailed northwards, then, till he met Spanish ships. For nine months he sailed north along this coast. The sun became hotter and hotter; it got to be right overhead, and then these Englishmen saw it to the south again, instead of to the north, as it had been for so many months.

When they were so far north that there were no more Spaniards to be seen, they left the coast, and sailed straight out to sea to the west. This was easy, for the wind was right behind them, and they crossed the great broad Pacific Ocean in a little more than two months, about the same time as they took in getting round the south of South America. So they came to the East Indies. They had gone west, and had come round to the very east of the lands that were known. In the East Indies they stayed for six months among the islands; then they sailed west round the south of Africa, and arrived home after having been away for three years.

Magellan had been killed in the East Indies while attempting to sail round the world. Drake was the first captain to come back in his ship after sailing round the world.

The Globe.

Look at a globe. Notice the great Pacific Ocean, across which Drake and Magellan sailed. See how large it is—from one side to another it is almost half-way round the world. Notice the lands round this ocean. On the one side are North America and South America, on the other are Asia and Australia.

Notice that North America and Asia are almost joined, and that North America and South America are just joined by the narrow piece of land, the Isthmus of Panama, from which Drake and Balboa first saw the Pacific. If your globe is painted so as to 'show relief,' as it is called—that is to say, if different colours are used for land of different heights—you will notice that all round the ocean the very edge of the land is marked brown. This means that there the ground is high. Some parts are higher than others. In some parts the whole land becomes lower; then the sea comes over the lower parts, and only the highest parts remain above water as islands. Notice the East Indies between Australia and Asia. In Behring Straits even the highest parts are so low that the sea has covered them all, but the sea is so shallow that St. Paul's Cathedral would stand out of it anywhere.

Notice the Atlantic Ocean, across which Columbus was the first to sail. It is not nearly so large as the Pacific. Notice that the Arctic Ocean is just a bay of the Atlantic. On the one side are North America and South America, on the other are Europe and Africa. Notice that there is not nearly so much high ground round the edge of the lands, so the great rivers flow to the Atlantic rather than to the Pacific.

South America.

Relief—*The High Ground.*—Notice specially on the globe the shape of South America, and then turn to a map of South America, and notice exactly where

the high ground is. There are three great areas where the surface of the ground is much above the level of the sea. One of these areas, called the Andes, stretches all down the west side; another, called the Highlands of Brazil, is on the south-east; and the third, called the Highlands of Guiana, is on the north-east. Do not think, because the map is small, that South America is small, or that those highlands are small. Look at the map, and you will see somewhere a scale which will tell you what length stands for one hundred miles. Measure the breadth of the Andes where the high land is broadest. Now think what that means. It means that these mountains are *not* just one ridge, steep on each side, and going up to a point in the middle; it means that there is a great wide stretch of high land, in some places broader than the length of England, and as long as eight Great Britains put end to end. Measure the length and breadth of the Highlands of Brazil, and compare these with the length and breadth of England. Do the same with the Highlands of Guiana.

The Andes.—The map cannot tell us everything; it can tell us only the sizes and shapes of places, and what direction one place is from another. You must also know what the Andes and the Brazil Highlands and the Guiana Highlands are each like when people see them.

Now, suppose you were to sail along the west coast of South America, as Drake did, what would you see? If you were close to the shore, you would

in most places see high cliffs, which would shut out the view of any hills and mountains behind, just as a wall of six feet high, if you are close to it, may prevent you seeing the house behind it. Here and there, however, you might notice a river valley, and at the head of it you could catch sight of the higher ground. In some places you would be able to look across a few miles of plain and see the land rising to the hills.

A little farther out at sea you would not notice the plains nor even the cliffs, but you would see the ranges of mountains far away in the distance. Farther out at sea still, thirty or forty miles out, you would see away behind those lower mountains a grand line of snowy peaks, and you would have to imagine that beyond the snowy mountains was the great stretch of high ground which on the farther side rose again to high mountains, and sank to the lower ranges on the east of the Andes.

Crossing the Andes.—Now, suppose you were to land on the west coast just where the Andes are broadest. There are very few railways in South America, but there happens to be one just here, by which people can go straight inland and on to the high ground. After leaving the strip of low land along the coast, which is a dry and dusty desert, you would come to some hills. A train cannot go straight up a steep slope ; it has to go slantwise along the side. If there is a valley, so much the better, for then the train can go forward as well as up ; but if there is no valley, the line has to be made zigzag

up the slope. That is what has been done here. As you went up and up, you might sometimes see the blue ocean far away, but all around would be dry and dusty, except that once you might see a green valley where the water of a stream from the Andes is used to spread over the ground. Farther up you would come to a flat and level plain, but still the land would be almost desert. Away eastward in the far distance, however, you would see the line of snow-clad mountains; and, when you came near them at night, the train would stop at a little town in the centre of another cultivated valley, in which you would see farmhouses and fields of grain, clover, and potatoes, with here and there a village.

If you went on again next morning, you would find the high rocky mountains all around you, and every few miles more valleys, where the streams are used to water the fields. At last, more than a hundred miles from the sea, you would be able to cross the mountains where they are lowest; but even this lowest is more than three miles high, so high that water freezes every night in the year, and there is not enough air for some animals. Horses cannot work properly.

Then the train would go downhill a little, and over lower ground for a long distance—almost another hundred miles—till it came to a large lake, which lies in the lowest part of the level ground between the mountains on the west and those on the east. The train goes no farther, and few people care

to cross those mountains on the east, and descend through dense forests to the low ground beyond.

Crossing the Andes in the South.—If you landed at Valparaiso and went inland, you would find no dusty plain, but would begin to climb mountains at once. You would not climb nearly so high as in the north, and you would descend on the other side to level ground which is much lower than the level ground between the mountains on the north. After crossing this long valley or plain, which is broad also, you would climb the mountains on the east. It is the mountains on the east which are the high ones; they have snow on them all the year round, and even at the places where people cross, it is very cold even in summer. There is no railway from the one side to the other, but one is being made. It is not an easy railway to make, for it has to climb high up, with high mountains on either side for forty or fifty miles.

The Brazil Highlands.—Look at the physical map again, and you will see that the Andes are marked a darker shade of brown than either the Highlands of Brazil or the Highlands of Guiana: that tells you that the Andes are much higher than either of the other two Highlands. You may also see from the map that the highest part of the plateau of Brazil is quite close to the sea; but, if you sailed along the south-east coast of Brazil, you would see no great snow-mountains away in the distance; the hills are not high enough. You would see the shore and lower hills, and even the greater heights beyond, all covered with forests. If you went inland, and

climbed one ridge behind another, you might find yourself at last on a flat grassy top, which stretched miles away. Farther on you might come to the steep edge of a valley, in which a river flowed through thick woods far below; while away in the distance you might see the steep edge on the other side, and on the top would be another bit of the grassy plateau that stretches, except for the river valleys, for hundreds of miles to the north-west. How many hundred miles does it stretch?

The Guiana Highlands.—These are very difficult to get at, and very little is known about them. One reason why they are so little known is that the land is all covered with forest, and not only is it difficult to go through forest, but there is no place from which one can get a view for a long distance.

The Low Ground.—Look again at the map, and you will see that in between the high parts the ground is very low. There are three big pieces of low ground: The Selvas are in the middle between the Highlands of Brazil and the Highlands of Guiana; the Llanos are in the north between the Highlands of Guiana and the Andes; in the south-east is the third piece of low ground, part of which is called the Pampas. Each of these is very low and very flat—so low that the sea comes over a part of each of them. In the south, the part where the sea comes over is called the Rio de la Plata. In the east is the mouth of the Amazon, and in the north is the mouth of the Orinoco.

The Selvas.—Measure how long and how broad

the plain called the Selvas is. Think how enormous this plain must be ; yet even at the very foot of the Andes on the east side it is not six hundred feet above the sea. If you went along a road a mile long, which was only ten feet higher at one end than at the other, you would think the road was quite level. You would not see the slope, yet every mile that you go westwards on the Selvas from the mouth of the Amazon is only three or four *inches* higher at the one end than at the other.

Besides the large pieces of low ground, there is at each end of the Andes, between the mountains on each side, a long, narrow piece of low ground—so low that the sea comes over a part of it, just as the sea comes over the lowest part of the great pieces of low ground. In the north you see the Gulf of Maracaibo ; in the south you see all the islands which are just the tops of the outer mountains, and between the islands and the land is a piece of water which is really just the south part of the valley or plain which is below the level of the sea. At the north end of the Andes there is an island also—Trinidad—which is really just part of the mountains separated by water from the rest.

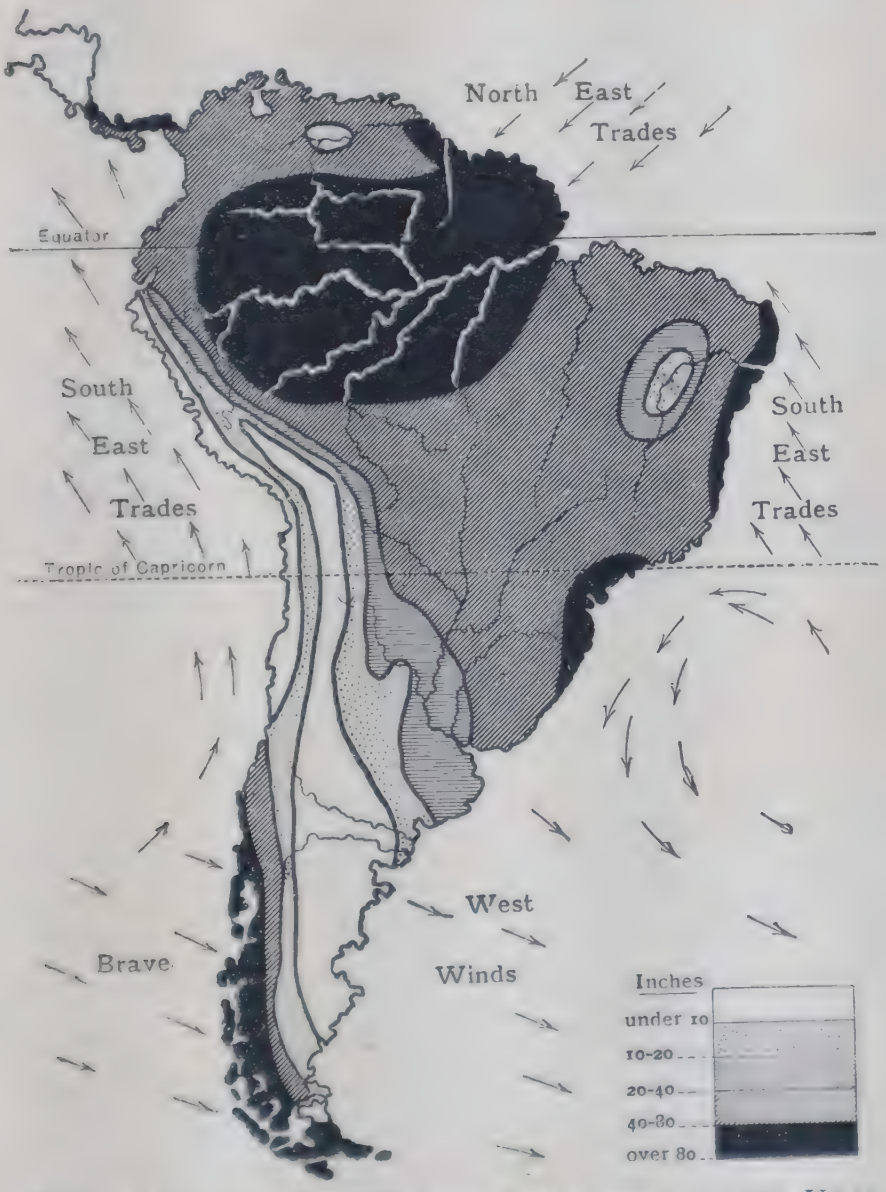
Winds and Rain—*Winds.*—Now, you will remember that, when Drake was sailing round the world, he found it very difficult to get away from England, because the winds were always blowing against him. You will remember, too, that, after he left England, he went comparatively quickly till he passed through the Strait of Magellan, when he found the

wind blowing against him so much that he was blown away south-east towards Cape Horn. Other sailors after Drake's time found that the winds were against them in going westward through the English Channel, and through the Straits of Magellan, but that the winds helped them to sail across the Atlantic.

If you notice how the wind blows in your own district for a month or two, you will see that it comes much more often from the west or south-west or north-west than from any other direction. But, if you were in the north-east of South America, you would notice that the wind came more often from the north-east than from any other direction; in fact, you would notice that for many days together it would blow from the north-east without changing. If you were in the south of South America, however, you would notice that the winds were like those we know in Britain: they come from the west.

Now look at the map which shows the winds; you cannot see wind, but those little arrows show how the wind generally blows. You can now understand why Drake went so quickly across the Atlantic: it was because the winds blew him across to America. These winds are so steady as almost to tread out a path for themselves, so they are called Trade winds: those coming from the north-east are called the North-East trades: those coming from the south are called the South-East trades. The winds that come from the west—those that come to us in Britain, and those that blow across the south of South America—are called the Westerlies, or the Brave West Winds.

Rain.—If you leave a saucer of water in a room and after a few days go back to look at it, you will



SOUTH AMERICA: WINDS AND RAIN DURING THE YEAR.
The darker the land is shaded, the more rain falls.

find that all the water has disappeared. it has evaporated, or become vapour; it is in the air, though

you do not see it. All over the ocean the water is evaporating, or becoming vapour. It stays in the air till the air becomes cooler, and then it cannot stay any longer in the air ; so it first becomes a cloud, and then falls as rain. If there were no winds, if the air did not move about, all the rain would fall on the sea, and none on the land. All the water that is on the land, has come from the sea, and the winds have brought it. Of course, if water drops out of the air on to the land, and runs off the land back to the sea again, the wind gets drier and drier as it blows farther and farther away from the sea from which it gets its dampness. There is more rain on those parts which the wind reaches first. If you notice, not only the direction from which the wind comes, but also whether there is rain or not, you will find that the rain falls much more often when the west winds blow than when the east winds blow, just because the west winds come from a great broad ocean and the east winds do not.

Now look again at the map of South America showing winds and rains, and notice that it is very, very wet where the north-east trade winds come to the great low plain of the Selvas, and where the south-east trade winds come to the edge of the Highlands of Brazil ; notice, too, that it is very wet where the westerlies come to the south-west side of the Andes.

On the Pampas it is dry, because the west winds reach that part of the land after they have come down from the Andes. You remember, too, that,

just at the bend of the west coast, there is a dry and dusty desert. That is because the trade winds reach it only after they have passed all the way across the broadest part of South America, and have risen right over the cold Andes, where a great part of the rain drops on the east side, so that there is very little left for the west. The very driest and dustiest part of this west coast-land is called the desert of Atacama.

The winds that blow on to the north of South America, pass over the end of the Andes before they reach the lower ground on the south, so that the Llanos are not nearly so wet as the Selvas. The winds that blow to the Highlands of Brazil drop a good deal of their rain just when they come to the land, so that the rest of the highland is not so wet.

Remember, then, that the Selvas and the South Andes are very wet, while the desert of Atacama is very dry, the Pampas are dry, the Brazil Highlands and the Llanos are rather dry, and that this is so all because the winds that reach these places either bring rain or do not bring rain.

Rivers.—In the lowest part of each of the three great pieces of low ground are the three great rivers of South America. Of course, they go into the ocean where the land is so low that it is below the level of the sea. The three great rivers are the Amazon, the Orinoco, and the Parana. Measure the lengths of these rivers, and think what the lengths mean. The Amazon is longer than the distance across the Atlantic; only half-way to the sea it is three miles

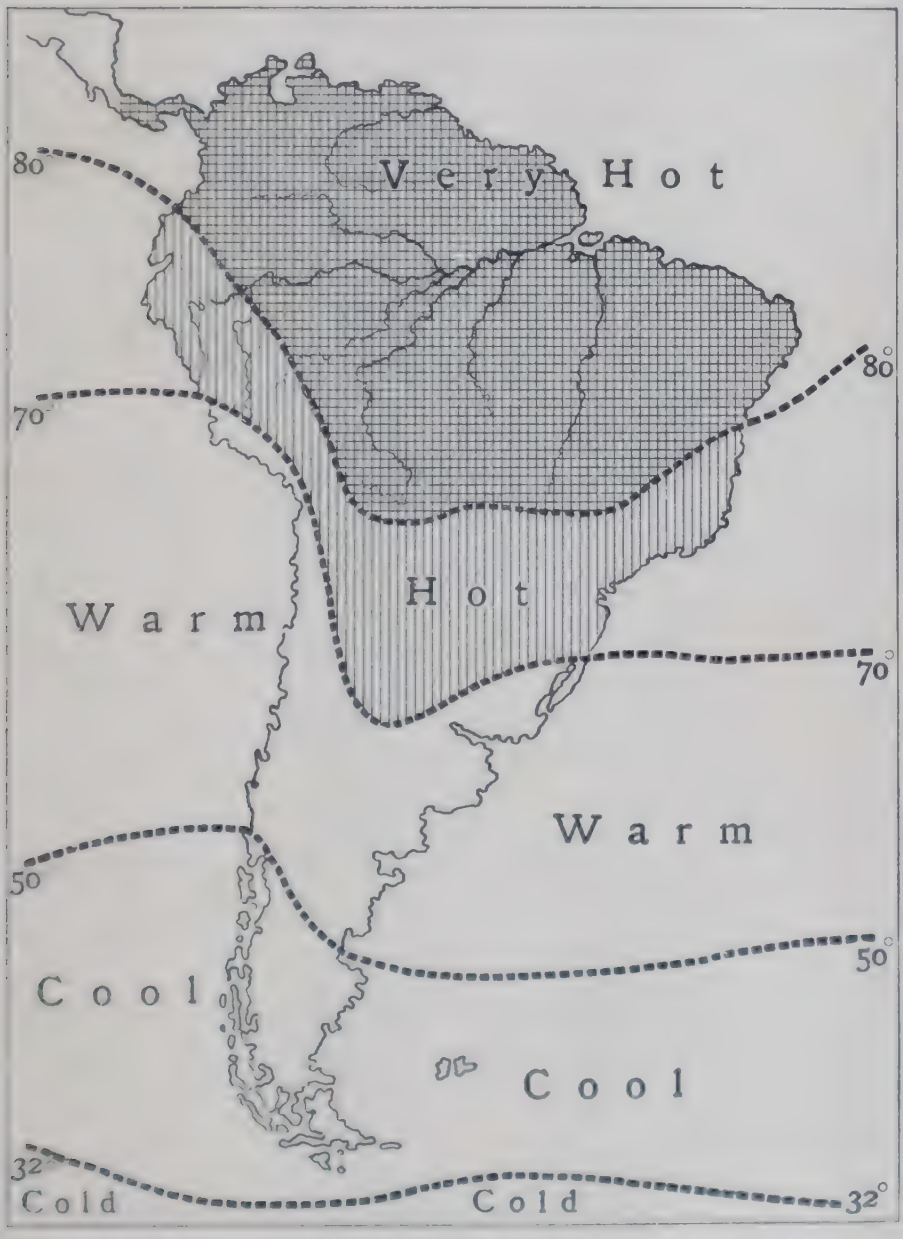
wide ; then it gets wider and wider—four, five, six, ten miles wide — as wide as the length of the longest lake in England. Even that is not its widest, for two hundred and fifty miles before it reaches the sea, it is fifty miles wide—that is, as far as from London to Brighton. If you do not know what that distance is, think of another distance that you know to be fifty miles, and you will know how wide the Amazon is. The Amazon has many great rivers carrying their water to it to help to make it so big ; they and the Amazon are such large rivers partly because the flat part is so large ; but there is another reason. You have learned that just in this part there is a great deal of rain, and the more rain there is, the more water must run off the land back to the ocean. So much fresh water runs into the ocean that for one hundred and fifty miles out to sea beyond the mouth of the Amazon the water is scarcely salt at all.

The Parana has another great river—the Paraguay —flowing into it, but it has not so far to go, and the lowland is not so large ; and, perhaps most important of all, it has not so much rain to take to the sea, so it is not so large ; yet it is an enormous river.

The Magdalena is one of the rivers in the highlands ; it flows north to the sea at the end of the Andes in the valley between the mountains.

Temperature.—You know that, if you sailed south from England as Drake did, you would find it grow warmer and warmer ; the sun shines more and more straight down at midday, and feels hotter and hotter. One day you would find it right above you, and you

would have no shadow. Then, as you went farther south, you would require to look northward for the



South America: Temperature during the Year.

sun at noon, instead of southward, as we do in Britain. You would feel less and less warm, and by

the time Cape Horn was reached you would be quite cold, if it were winter there. The north of South America is where it is hottest ; the south where it is coldest.

The Selvas, then, are very hot as well as very wet ; the low ground south of the Pampas is cold as well as dry ; while the Llanos are hot as well as somewhat dry.

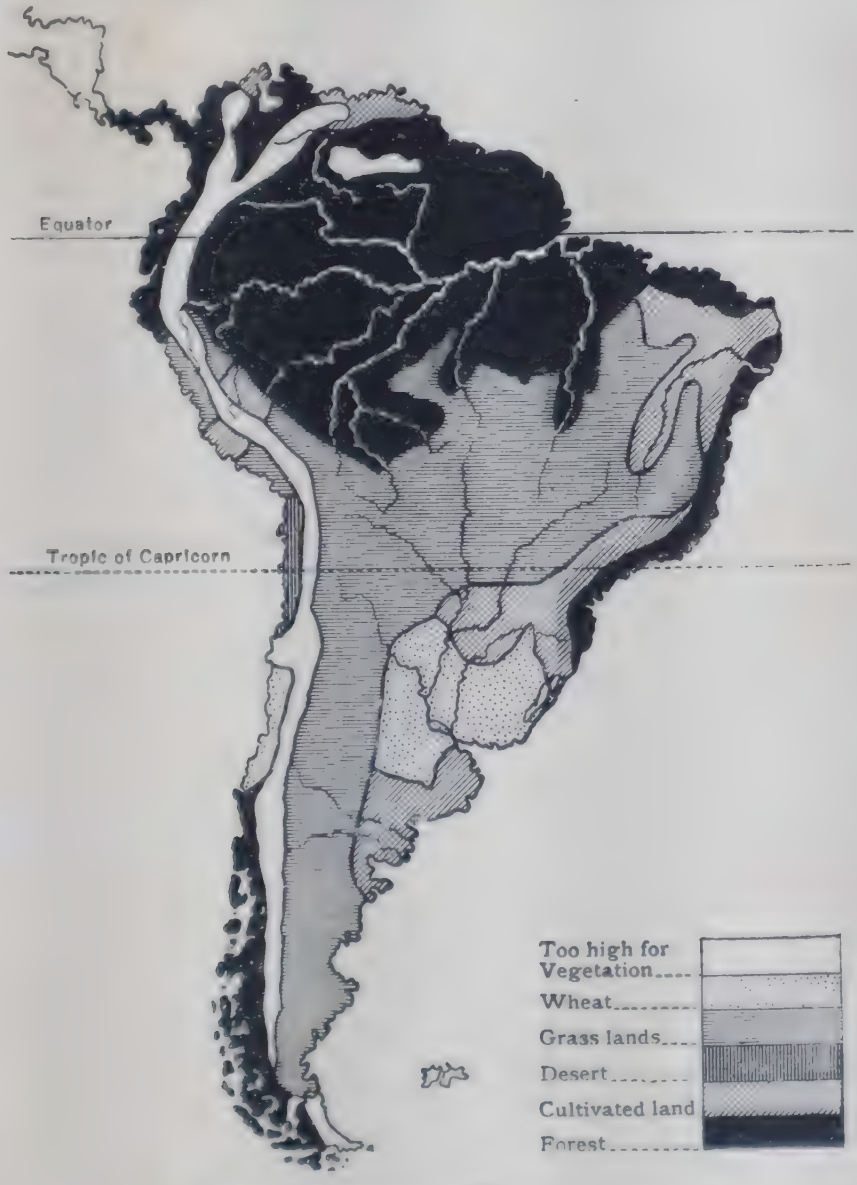
But, if you climb up to ground which is high, it will become colder and colder ; so on the top of the great plateau of the Andes in the north of South America it is quite cool at night, while the highest parts of the Andes on the south are very cold indeed. and have snow on them all the year round. Where does this snow come from ?

The parts of South America which are most comfortable to live in, those which are neither too hot nor too cold, are around the mouth of the Parana, and on the coast opposite it on the west, and also on the higher parts of the Andes on the north.

Vegetation.—We have now learned that some parts of South America are very hot, and others very cold ; some are very wet, and others very dry ; some are very flat, and others are on a slope. Just because of all these things many different kinds of plants can grow.

In the wet, flat, hot Selvas are great dark forests, with tall trees crowded together, and each one fighting to get as much light as possible. Down on the ground it is all wet and steamy, and climbing plants grow so fast that, instead of putting up telegraph-

poles to carry wires into the centre of the country, men have laid a cable up the Amazon, just as if it was



SOUTH AMERICA : VEGETATION.

an ocean. This is the biggest forest in the world. If you were to sail up the Amazon, you would see the edge of the forest, as it were, and you would have

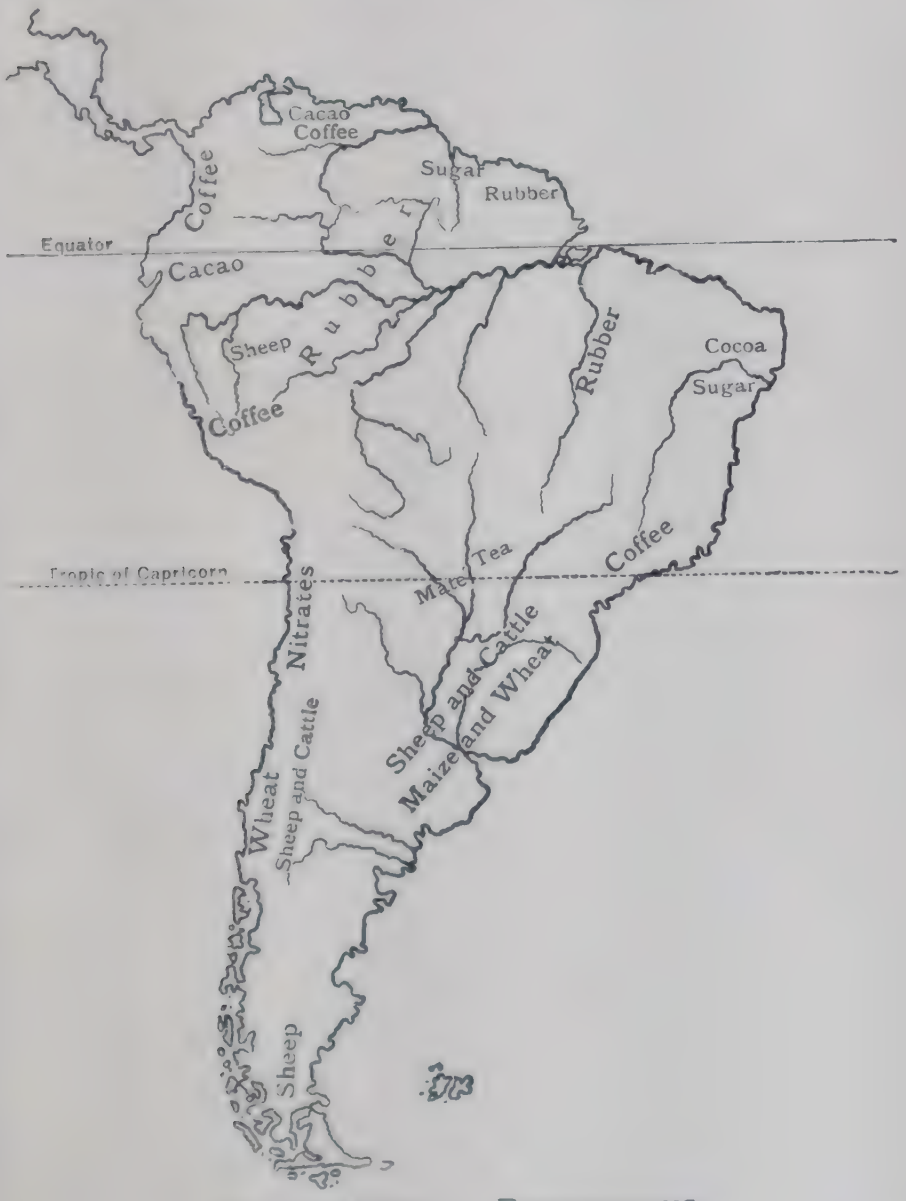
to imagine that it stretched for miles and miles in every direction. The Amazon and its tributaries are just great lanes cut through it. Trees grow all over the Selvas, and even up the east side of the Andes.

There is a forest, too, in the north-west of the Andes, where the winds also bring rain. You will remember, too, that the west winds bring rain to the south-west of the Andes, and that the south-east trade winds bring rain to the south-east of Brazil, so that in each of these places there is forest also.

In the north of the Andes and in Brazil part of the forest has been cut down, and coffee is grown ; for coffee grows best on wet, warm slopes. Why is coffee not grown where there is forest in the south-west ? Cacao, from which cocoa is made, is grown where the forest has not been quite so thick, north of the Orinoco. In the great dark forest of the Selvas the Indians gather the rubber, which is the juice of various trees and climbing plants.

Where it is very high and cold, nothing will grow, and where it is very dry, nothing will grow. Elsewhere there are different kinds of grass, unless people have planted other things. On the Pampas there used to be great tall pampas-grass, but now wheat is planted there in some parts. The land can grow good wheat, for it starts to grow when the rain comes, and ripens in the warm, dry summer. In the Llanos, where there is more rain, trees grow here and there among the grass ; while north and south of the desert of Atacama there is very little grass, and it is very dry and dusty.

Look at the map, and you will see where the forests and grass-lands and deserts are.



SOUTH AMERICA: PRODUCTIONS.

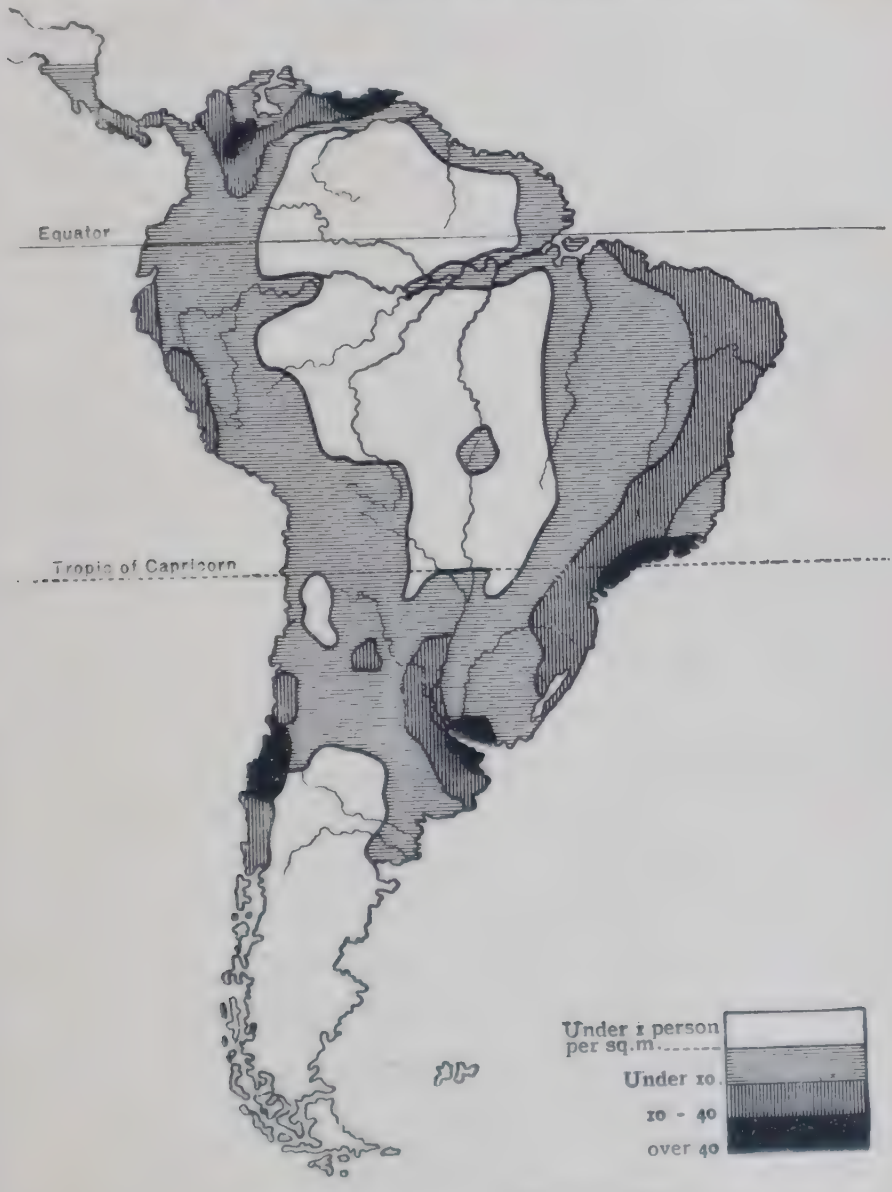
Now, just as different kinds of plants are suited by different kinds of places, so different kinds of animals also like different kinds of places to live in. Some

animals live on one kind of food, such as grass; others live on the fruits of trees. In the forest are all sorts of wild animals and birds; most of them live high up in the trees near the top, where there is more light and air. But the most important animals live on the grass-lands; there are sheep in the cold south, even in the Falkland Islands; the vicuna and alpaca and llama, sheep with long necks and straight hair, something like camels, live on the grass-lands on the highlands of the Andes. There they are most useful; they are used to carry things because horses cannot live for long at such a height; their wool or hair is used for clothing and their flesh for food. Where it is a little warmer, and there is a little more water, cattle can thrive. On the lands round the Rio de la Plata there are immense herds of cattle.

The People and Countries.—Now, we should be able to tell what parts of South America are the best for people to live in. We have seen that the north of South America is very hot and rainy, and covered with trees, so that very few people live in the Selvas, and there are no really big towns. But the Amazon is such a splendid 'road' that there is one town at the mouth—Para—where the rubber is brought from all parts of the forest before it is sent away to other lands. There is also another town—Manaos—about half-way from the sea to the mountains.

On the top of the great plateau of the Andes it is cooler, and it is not so wet, for the mountains on the

edge of the plateau take most of the rain, so that it is more healthy; and there are some towns, such as



SOUTH AMERICA: POPULATION.

Bogota—the most important town of the country called Colombia—and Quito, and La Paz. But these towns are too difficult to get at from places far away

from South America, or even from other places not very far away. There are no good roads and very few railways, so that these towns are not very important.

In the south, beside Cape Horn and the Strait of Magellan, it is very cold and misty and stormy, so not many people live there.

The best part of South America is where it is not too high, not too cold nor too hot, not too wet nor too dry. You know, then, that the best place to live in is near the Pampas, and on the other side of the Andes from the Pampas. The one is the middle part of the country of Argentina ; the other is the middle part of the country of Chile. In the one is the largest city of South America—Buenos Ayres, which means 'good air'—and in the other are the two towns of Valparaiso, on the coast, and Santiago, in the Central Valley. Besides being neither too cold nor too hot, the best part of Argentina has a great advantage in being beside the Rio de la Plata, up which ships can easily sail. Monte Video, in the country of Uruguay, on the east side of the Rio de la Plata, has this advantage also.

The south-east side of the highlands of Brazil, though it is rather hot, has fresh sea-breezes, so that this is another rather important part, and there are some large cities there. Rio Janeiro is the largest. But there is no way of getting easily far into the country, so that all the people live close to the sea.

Now, if you look at a map showing where the dif-

ferent countries are, you will notice that there are five where the people live on the high Andes—Colombia, Venezuela, Equador, Peru, and Bolivia—and that four of them have seaports on the coast. You will notice that there are three in which the people live on the low ground, which is not too hot or too cold—Chile, Argentina, and Uruguay. You will notice, also, the one great big one, Brazil, where the people live on the south-east part of the plateau; and one in the middle, which is of no importance, because very few people live there. That leaves the three parts which belong to Britain, Holland and France—the Guianas—in the north; there people cannot live on the plateau, because it is all forest, and along the coast of French Guiana and Dutch Guiana it is very unhealthy.

The Discovery of America.

You will remember that Drake sailed away round South America because he had crossed the narrow piece of land which forms the Isthmus of Panama, and had seen the Pacific Ocean on the other side. But even this narrow piece of land had not been known of very long at that time—not a hundred years.

For thousands of years people had known of the Atlantic, but they had always been afraid to sail out of sight of land, and see what was on the other side. They had sailed round the coasts of Europe and other lands near Europe, but everyone was afraid

to be the first to go away west into the Atlantic, so for long ages no one went.

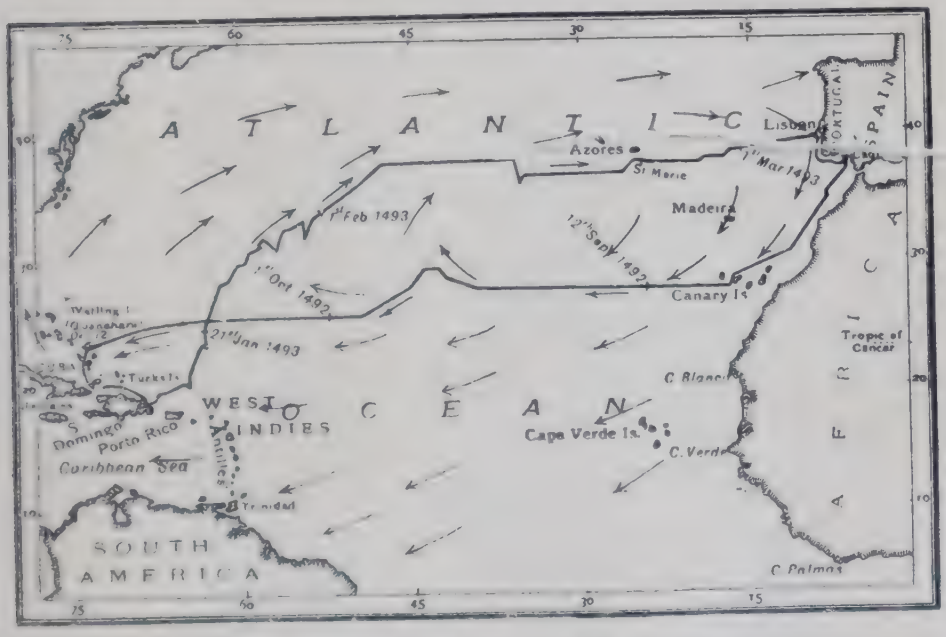
Nowadays very many people are continually crossing the Atlantic, because there are lands on each side, and they wish to go from one to the other, and there are always a great many ships sailing on this ocean ; but before America was discovered, the most important sea was the Mediterranean Sea—the sea ' in the middle of the lands ' which were then known.

In the Middle Ages the city of Genoa was a great commercial town ; boats sailed from it to all parts of the Mediterranean Sea, and its seamen and merchants were very well known. One of these was a very clever man, who felt that the world must be round, though nearly everyone else said it was flat. Now, the world does not look round ; and when Columbus said that it was round, they all laughed at him. However, he kept on saying, ' It is round, and if you go west, you ought to come to the lands you now reach when you go east '—the Indies, as they were called, because they were near India.

He had not very much money himself, so he went to the King of Portugal, who seemed interested in finding another way to the Indies, to ask him for some ships and men to sail away west with. The King of Portugal would not help him, however ; so he went to the King of Spain, and at last, by promising that all the lands he found should belong to Spain, he got three ships.

In 1492 he sailed away from the south of Spain, but he did not go straight west. Look at the map

which shows how he went. The winds from the south of Spain blow nearly always from the north, so he sailed south first. Then, you see, the winds blow from the east, and just a little from the north; so Columbus sailed almost west, but just a little southwards. The winds blew so steadily behind him that his men grew very much afraid that they would never be able to sail home again, and time after time asked



THE FIRST VOYAGE OF COLUMBUS.

The lower line shows the voyage west; the upper line shows the voyage east.

him to try to turn. On only one day was there a wind against them, so they got on quite fast; and in less than two months they had sailed right across the Atlantic, where no one had ever gone before.

When they had crossed the Atlantic, they came to a number of islands all together—the Bahamas. Then they came to a larger island farther south, now

called Cuba. After finding another island—Haiti—they sailed back, but they did not sail back the way they had come. Columbus knew the trade winds would be against him, so he did a very clever thing: he first went away north, to where the west winds are, and let them blow him home. No one had told him there were any west winds there; he just thought they ought to be.

When he arrived in Spain, he was greatly honoured, and allowed to sail west again in a much larger ship than he had had before. This time he thought he would go farther south to find other islands which were south-east of Haiti. The trade winds were just as favourable, and he found the islands he was looking for, and afterwards he sailed on past Puerto Rico and Jamaica. When he was going back, he wished to see how he would get on against the trade winds, so he kept to the south; but, of course, he took much longer, and he did not sail nearly so straight.

On his next voyage he kept farther south still, and discovered Trinidad and part of South America. On his last voyage he discovered Central America, and spent a long time sailing up and down the coast looking for a strait.

It was not accident that made him discover so much. He used his wits to think—to think which was the best way to go and the best way to come back, and what all the things he saw really meant. At Trinidad he found the water of the sea was almost fresh, so he said that there must be a great river near

there, though he never saw it. If there was a big river, there must be a big piece of land or a continent ; so, though the land he saw was only an island, he knew there was a continent somewhere near him.

Columbus never knew he had discovered America ; he thought he had sailed round to the east of Asia, and had really come to the Indies. When it was found that these islands were not the Indies at all, they were called the West Indies, to distinguish them from the East Indies.

North America.

Relief.—Look at the physical map of North America, and notice where the high ground is. You will see that about half of North America is marked brown ; you know that means that about half of North America is high. There is high ground on the west, and there is high ground on the east, and between these the ground is low. The high ground on the west is one great long, broad area. Measure it, and find out its length and breadth. On the east the high ground is divided into three parts.

The High Ground on the East.—There is the large plateau of Greenland quite separated from the mainland. On the mainland to the south of it is the Laurentian Plateau. Then there is a valley, which is so low in the east that the sea comes over it ; and south of the valley are the Appalachian Highlands. Newfoundland is really a part of the highland separated from the rest by the sea.

The Low Ground in the Middle.—Between the highlands on the east and the highlands on the west is the low ground. On the north it is so low that the water floods over part of it to form the great Hudson Bay. Measure it to find out how large it is. Hudson Bay is not very deep ; it is really the centre of an enormously great big shallow saucer. The rim of the saucer is rather broken on the north, so that the sea comes through the breaks. Baffinland is part of the rim, and Hudson Strait is one of the breaks. On the other sides the rim is not so much broken.

In the south the lowest part in the middle is called the Mississippi Valley, and the low ground round the coast and round the south and south-east of the Appalachian Highlands is called the Coast Plain. The Peninsula of Florida is really part of the Coast Plain ; most of it is very little above the level of the sea.

The High Ground on the West.—This is called the Cordillera. It is not nearly so high as the Andes, and there is another difference between the two. You remember that the land called the Selvas is very low right up to the east foot of the Andes. Now, if you were to start from the Mississippi Valley and go west, you would find the land very flat ; you would see no hills, only endless plains stretching away and away on all sides, and covered with thin grass. The land would look quite level, but really the west would always be higher than the east. The west end of every mile would be between five and ten feet higher than the east end, so that by the time you

had gone six hundred or seven hundred miles you would be a mile high, without knowing it. For the first two hundred miles the plains are cultivated, but after that there is only grass, green in spring, but dried up and withered in summer and autumn. Here and there you might see a stream with low banks, but there would be no valley. After going west some seven hundred miles—about the length of Britain—you would begin to see high mountains away in the distance; you would go nearer and nearer to them, and at length enter quite suddenly a narrow river valley. There would be high rocks on either hand, and just beside the train would be a river dashing along over great stones. As you went on, the river would become smaller and smaller. The railway goes higher and higher, till it crosses these mountains to the high plateau beyond. Wherever you tried to go west from the low ground in the middle, you would find this range of mountains, called the Rocky Mountains.

Along the west side of the highland there are two sets of mountain ranges, one behind the other, with a valley between, just like the valley in Chile. In the north and in the south this valley is so low that the sea floods over it. In the south the mountain range becomes a peninsula—Lower California; in the north even the lowest parts of the mountain chain go below the sea, and, instead of the mountains, there are islands, such as Vancouver and Queen Charlotte Islands, just as there are islands in the south of Chile. The range of mountains east of this

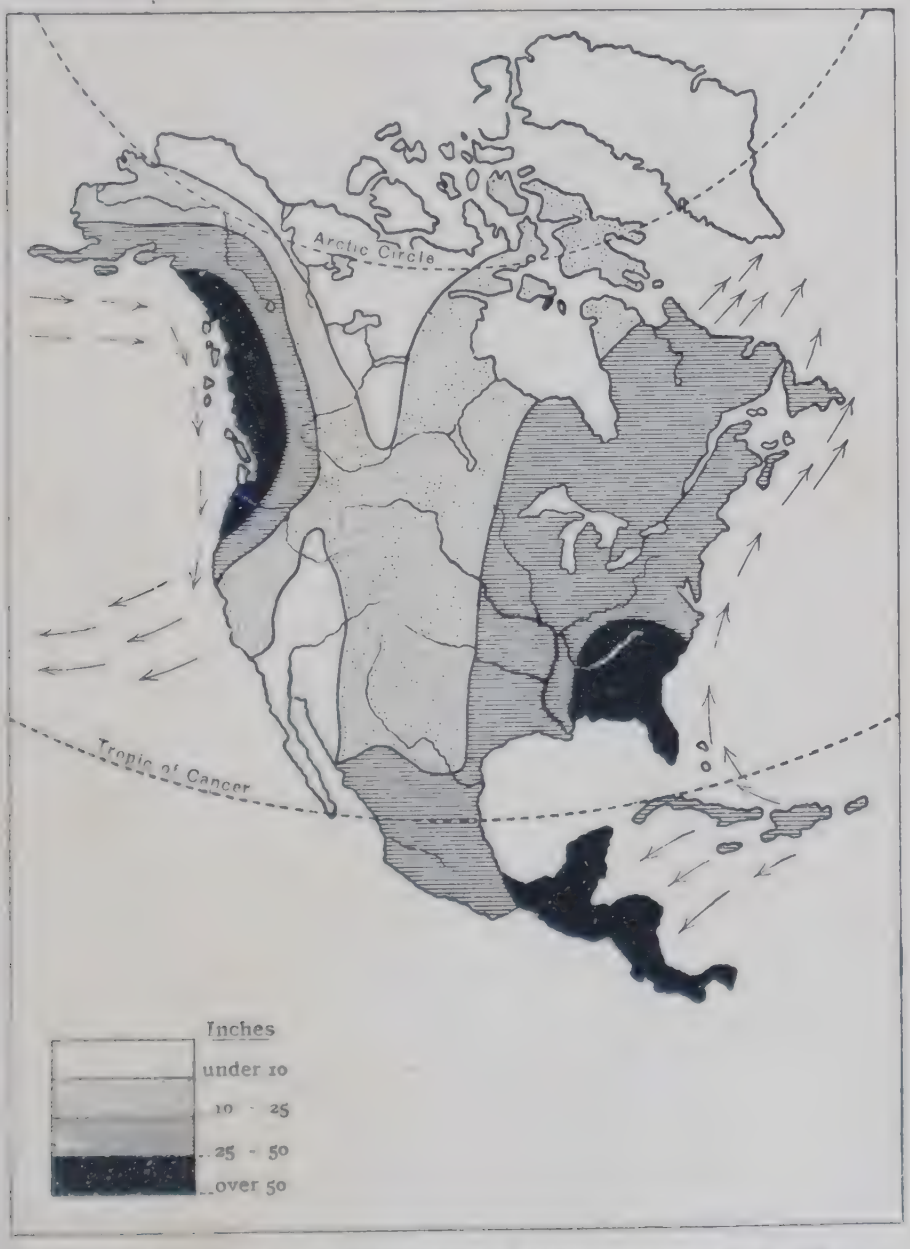
valley has different names in different parts: the Cascade Mountains and Sierra Nevada are two of them. Between the mountains on the east and the mountains on the west is a plateau. The broadest part of the plateau is called the Great Basin, because it is high all round and lower in the middle, just like a basin.

The Winds and the Rain—*Winds.*—You will remember that Columbus did not sail straight west across the Atlantic. He sailed a little south as well. That was because the wind blew him more easily that way. Drake also crossed the Atlantic easily with those same winds behind him. We said that, as they blow from the north-east, and are so steady, they are called the north-east trade winds. They blow across to the south part of North America.

Look at your map of South America again, and notice where the west winds are. They are about latitude 35° south of the Equator, so you might think you would have west winds in North America about latitude 35° north of the Equator. If you look at your map of the winds on North America, you will see they are there.

Rain.—You learned on p. 14 how the rain is brought to the land by the winds. When the winds blow to the land from the sea, there will be rain on the land; and after all the water has dropped out of the wind, there will be no more rain. You learned, too, that the rain drops out when the air is growing colder; but when the air is growing hotter, it can hold more moisture, and so no rain falls. All

this, of course, is as true of North America or any other place as of South America.



NORTH AMERICA: WINDS AND RAIN DURING THE YEAR.

Look at the map, and notice these things:

1. Where the North-East Trade winds blow against

the narrow land of Central America it is very wet, just like the parts of South America to which the Trade winds blow; but the land is so narrow that there is no great big wet part as there is in South America.

2. In the north-west, where the west winds come, there is a narrow part on the Cascade Mountains which is wet, just as there is a narrow part which is wet where the brave west winds bring rain to the south of Chile.

3. The east of North America is wet because the Trade winds, when they turn round and blow northwards to become west winds, are blowing from the sea to the land, and, besides, are growing colder as they go north.

4. There is a dry part on the west, where the Trade winds cannot come, or, if they do, they have come so far over the land that they have dropped all the rain before they get there.

5. There is a very dry part in the north, because the winds are so very cold before they come there that they have dropped all their rain.

Rivers and Lakes.—Because the high ground is in the east and west, it is difficult for the big rivers to go any other way but north and south; so there is the great river, the Mississippi, flowing straight south to the Gulf of Mexico; it has tributaries coming to it from the west and from the east. You have learned that there is plenty of rain in the east, so the Ohio has always plenty of water. But the west has not so much water, so, though the Missouri

is a very long river indeed, it does not bring much water to the Mississippi. In the south of the high ground the Rio Grande goes straight to the Gulf of Mexico. The land through which it flows, is even drier than the land through which the Missouri flows, so the Rio Grande is absolutely dry in parts for many months in the year.

If you look at the map again, you will see that there is no one big river flowing north as the Mississippi flows south. That is because the rim of the saucer, of which Hudson Bay is the centre, prevents the rivers flowing over it. In fact, the water collects in enormous lakes all round the rim of this saucer. You will see these lakes on the map : the Great Bear Lake, the Great Slave Lake, Lake Winnipeg, Lake Superior, Lake Michigan, Lake Huron, Lake Erie, Lake Ontario, and a great many more smaller ones. Measure some of the large ones, and compare them with Britain. They run into one another round the rim of the saucer each way, and form rivers. The Mackenzie flows north between the rim of the saucer and the Rocky Mountains, and the St. Lawrence goes north-east between the rim of the saucer and the Appalachian Highlands. Only one river—the Nelson—goes, as it were, through a notch in the rim where Lake Winnipeg has overflowed. The river which brings most water to Lake Winnipeg to make it overflow, is the Saskatchewan.

On the west of the Cordillera there are a number of quite large rivers, much larger than those on the west of the Andes, because the Cordillera are so

much broader than the Andes. Measure the length of the Fraser River and the Columbia River. These nearly always have plenty of water in them, because they are in a rainy district.

Farther south the rivers have less and less water ; sometimes they are quite dry. The Colorado is a long river, but it is of very little use just because of this. Some rivers in very wet countries are useful in draining the land ; that is, they take away a great deal of water where there is too much. Some rivers in very dry countries can be used to water the land ; that is, water may be taken from them to make things grow—(do you know any rivers of these two kinds ?)—but the Colorado flows in a valley that is very deep and very steep, so that all water for a long distance on either side soaks down to it, and leaves the land even drier than it might be : water cannot be taken from it to water the land, just because it is such a long way down to the level of the river. For this reason also, the Colorado is of little use.

At the very north end of the Cordillera there is the River Yukon, just as in South America the Magdalena is at the north end of the Andes.

You remember that the ' Great Basin ' is between the Rocky Mountains and the Sierra Nevada, and that it got its name because it is lowest in the centre. The water from the mountains runs together to form a lake—the Great Salt Lake. This water cannot flow away, for the land is high all round ; but, all the same, it never grows any larger, and is even

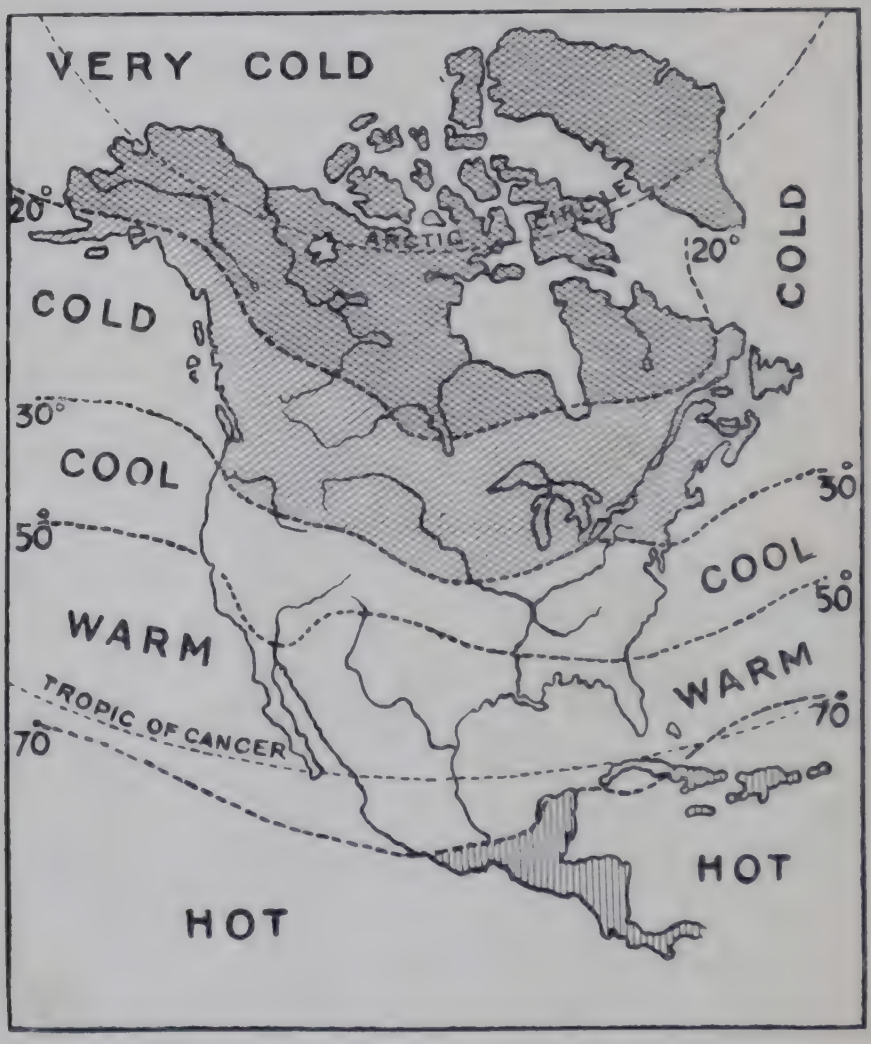
growing smaller, for the water evaporates as fast as the rivers bring it to the lake. Now, all rivers carry tiny little specks of salt with them; these specks are so tiny that you do not notice the taste. If a lake has a river running out of it, the salt is taken away as fast as it comes in; but, if no river runs out, and the water evaporates, then there must always be more and more salt left in the lake, and after a long time it becomes a salt lake.

The rivers that flow from the west towards the centre, are not so important as they look on a map, for, though some of them are very long, they have not much water, and sometimes have none at all, like the Rio Grande. This is because there is little rain, and because it is so hot that water evaporates quickly. On the east you have seen that the Ohio has plenty of water. All the little rivers flowing eastward from the Appalachian Highlands also have plenty of water. The Susquehanna and the Hudson are small compared with the large rivers in the middle, but they are rivers that you should notice; they go right through the hard Appalachian Highlands from one side to the other.

Temperature.—North America is the opposite of South America: it is hot in the south and cold in the north. In the north it is very cold indeed—so cold in winter that the rivers and lakes are frozen; even the large rivers are frozen. On the St. Lawrence and the Great Lakes no ships can sail for some months every year.

Look at the maps showing the temperature for

January and July. Compare them, and notice that in the far north it is cool in summer and very cold in winter ; in the south it is warm in winter and hot

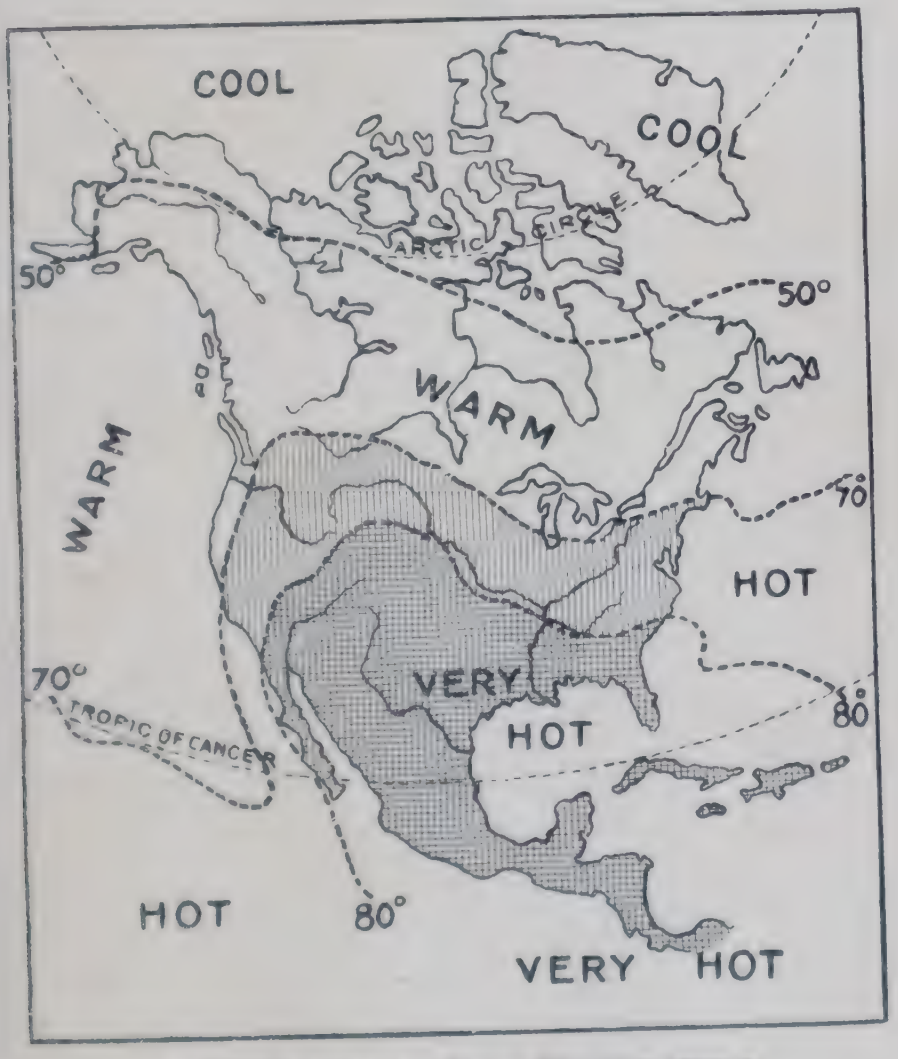


North America: January Temperature.

in summer ; while in the middle it is cold in winter, but warm in summer. Can you learn anything else from these maps ?

Of course, in the very high ground on the west it

is cold even in summer. The Sierra Nevada means 'The Snowy Mountains,' so that the name tells you that the mountains are cold enough to have snow



NORTH AMERICA: JULY TEMPERATURE.

on them. The mountains on the west are not quite so high as the Andes, so that they are not quite so cold, except in the very cold north.

Vegetation.—Now we must notice where different

things grow, where the forest and grass-lands and deserts are.

All vegetation requires two things, water and heat. Of course, some things grow with less water or less heat than others; grass can generally grow with less rain than is required for trees. Where there is no water, nothing will grow, and there is a desert; you remember the Desert of Atacama is where there is no rain. Where it is very cold, nothing will grow. On the tops of the high mountains in South America it is too cold for things to grow. In North America the north is cold, so that, even though it is low ground, nothing but moss will grow. Some other parts of the mountains, like the Sierra Nevada, are also too cold. These are cold deserts.

Then there are warm, dry deserts, where it is too dry for things to grow. Look at the map and see where they are.

Forests grow where there is plenty of rain. There are warm, wet tropical forests in the narrow part in the south of North America, and also in the land near Florida. Where the west winds bring rain there are forests, just as there are forests in the south-west of South America. In the land just south of the cold desert there are great pine-forests; these are all round the rim of the 'saucer.' The rest of the country either has grass growing on it or used to have grass; in the drier parts the grass is very thin, in the wetter parts there are some trees.

But a great deal of the land has been cultivated; things are grown that would not grow naturally.

In the centre, where it is cold in winter and dry in summer, there used to be great stretches of grass-

North America : Vegetation.

land. Now people are able to grow wheat, just as wheat is grown in the Pampas of Argentina. You

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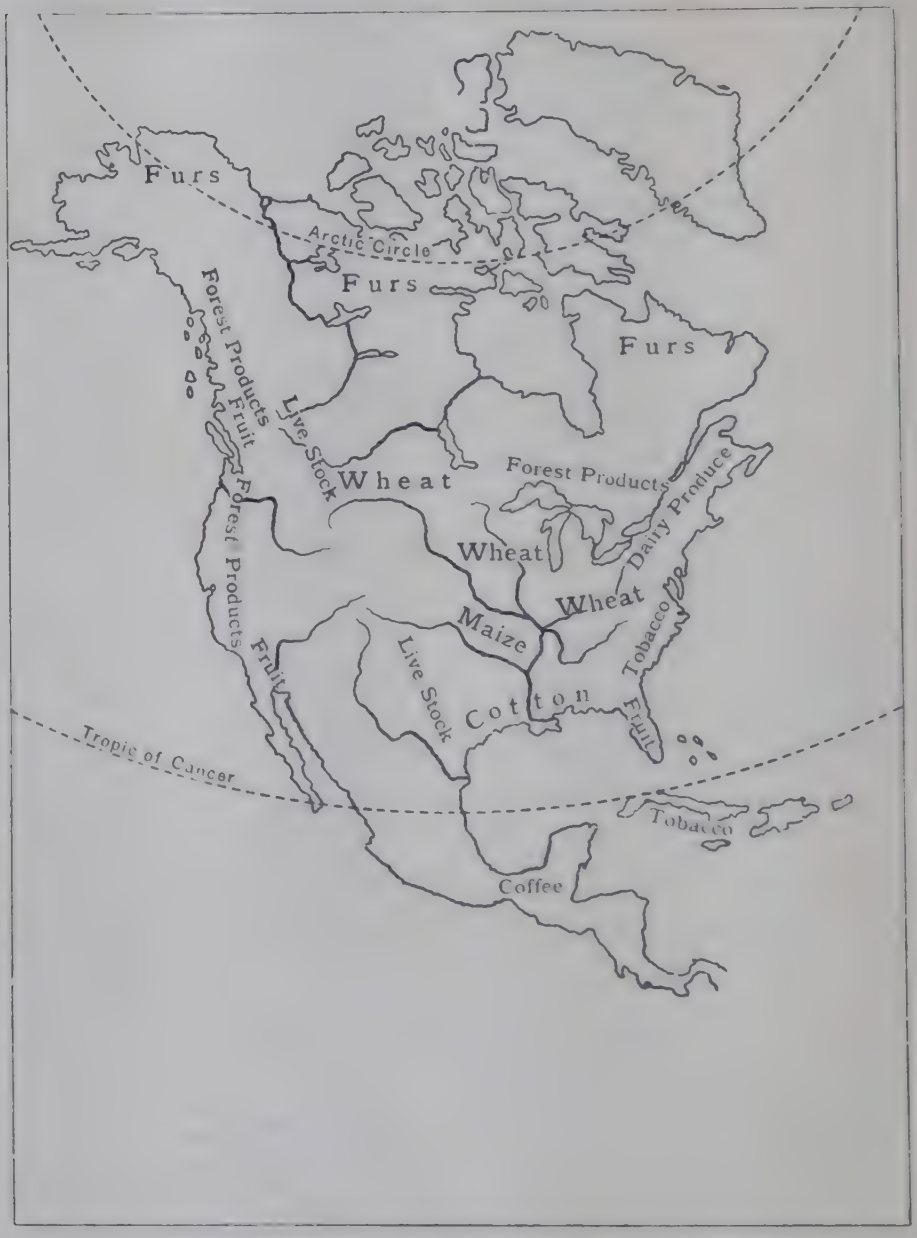
might think it was too cold to grow wheat, but it does not matter how cold it is in winter if the wheat



NORTH AMERICA: PRODUCTIONS.

is not growing. Though there is not much rain there, yet most comes in the spring when the wheat

is growing fastest, and it is followed by nice warm dry weather which ripens the grain.

Farther south still, where it is warmer and wetter, people can grow Indian corn, or maize ; and in the Mississippi Valley and on the coast plain, where it is very warm, cotton is grown. A little rice is also grown on the coast plain, for rice likes very wet land to start growing in. In the wet, hilly parts of Central America coffee is grown, just as it is grown in similar places in Colombia and Brazil.

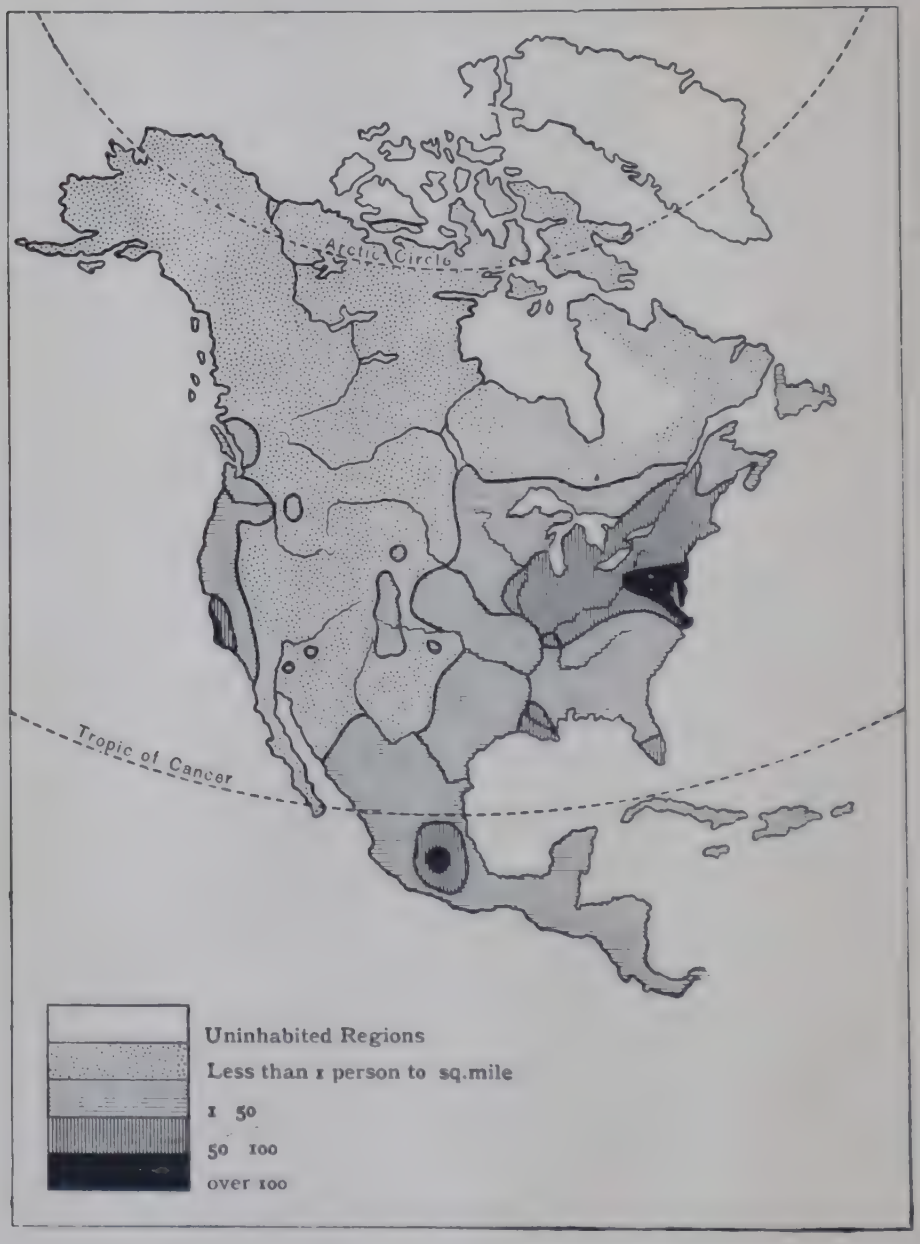
On the west of the Mississippi Valley, you remember, the ground rises gradually to the foot of the Rocky Mountains. In the western part of this it is too dry for anything but grass to grow. This is where the great herds of buffalo used to roam, but now cattle are fed on this grass ; they can eat the grass even when it is dried up, and then go to the little streams for water to drink. If necessary, they can be fattened on 'oil-cake' made from the seeds of the cotton plant ; the seeds are not used for anything else when the cotton is taken away from them.

You can see from the map where fruits and tobacco grow. Why do they grow there ?

People and Countries.—In the north it is far too cold for many people to live. On the high ground it is too dry, except in the part between the Gulf of Mexico and the Pacific Ocean. There in Mexico people do live, but the towns, like the towns on the plateau of the Andes, are so difficult to get at that they are not very important.

White people live where it is not very hot, not very

cold, and not very high. You remember that in South America most white people live near the Rio



NORTH AMERICA: POPULATION.

de la Plata. In North America all north of New York is cold in winter, some parts very cold; and

all south of it is warm in summer, some parts very warm ; so most people live not much farther north than New York, and not much farther south than New York.

New York and the places beside it, such as Philadelphia and Baltimore, are important for another reason. You have learned that the Hudson River and the Susquehanna flow right through the Appalachian Highlands, so that the land just beside these rivers is very low. For a long distance to the north and south it is difficult to cross the Appalachian Highlands, and even the St. Lawrence River cannot be used in winter, for it is frozen ; but near New York it is easy to go into the country, and easy to come out of it again, and just because of the low ground beside the Hudson and its tributary the Mohawk, New York, at the mouth of the Hudson, is the most important city.

Another way into the low ground in the centre is by the Mississippi. Though this way takes people a long way round from Europe, and though the south is rather hot, yet the city of New Orleans is rather important.

Chicago is the town at the south end of Lake Michigan, which you have to go round in travelling from anywhere near New York to the west of the lakes.

St. Louis is a large city right in the centre of the low ground between the lakes and the Gulf of Mexico. Notice carefully where it is, and think why it ought to be important.

Away on the west of North America is the city of San Francisco ; just there the mountains along the coast leave a gap, where the sea gets in. There is a good harbour, the only good one for a long way north and south along the coast ; and there is the valley behind, in which fruit grows. Look at the temperature maps, and see whether or not it seems a pleasant place to live in.

All these towns are in the country called the United States, because it is made up of a number of separate States all joined together. The peninsula of Alaska, in the north-west of North America, also belongs to the United States, but all the rest of the north is Canada. The way into Canada from Europe is by the River St. Lawrence, so the most important towns—Montreal, Quebec, and Toronto —are just beside this way. Think why these towns are not so important as New York. Winnipeg is an important town at the south of Lake Winnipeg ; it is like Chicago at the south of Lake Michigan.

Some other important towns are growing on the west coast of Canada. You remember that the north-west coast is wetter than the land east of the Cordillera, because the westerly winds bring rain ; it is also warmer in winter than the land east of the Cordillera, because the winds bring the heat from the water, which is warmer than the land. The towns are not very large yet, because white people have not been there very long ; but large towns will grow, just because it is comfortable to live there, and be-

cause it is shorter to go by boat to the east of Asia from Victoria than from San Francisco. Look at a globe, and notice how much shorter it is.

The Way to the Indies.

Before Columbus sailed to America, the Spaniards and Portuguese had been discovering lands and seas elsewhere that had not been known of before. For a very long time all the great square peninsula in the south-west of Europe had been ruled by the Moors, but gradually the people in the north of the peninsula took more and more of the land from these Moors. Portugal was one of the kingdoms which were thus made; and when there were no more Moors ruling in Portugal, the Portuguese went across to Morocco to fight them there, and take some of that land from them. They had to go in ships to Morocco, and when they had sailed along one part of the shore, they gradually went farther and farther south; each ship that went to discover new lands sailed farther south than the last. They found the Canary Islands and the Cape Verde Islands. Cape Verde means 'The Green Cape,' and they called it 'The Green Cape' because a great part of the land they saw before they reached it looked very desolate and barren, but near Cape Verde they saw trees on the shore.

Only a year or two before Columbus sailed to America, Bartholomew Diaz had sailed away southwards along the coast of Africa to try if he could find out more than had then been discovered. He passed

Cape Verde and the Guinea coast, and even the mouth of the Congo, and at last came to parts that no one had ever visited ; and still the coast was on his left hand as he sailed south. It grew colder and colder, and stormier and stormier, and at last he lost sight of the land altogether. By that time he had grown so accustomed to seeing the land always on the east, that he felt certain he would find it when the storm ended, and he sailed eastward. But, though he sailed east for a long time, he found no land ; so he went north again, and at last came to the land he was looking for. His men knew they must have passed some great cape, so they went only a little way farther, and then turned back, and so found the cape they had missed before. Because of the storms they had met with, they called it the Cape of Storms.

The King of Portugal was very pleased when Diaz came back with the news, for he saw that now the Portuguese would be able to go all the way to India by sea ; they would be able to bring all the spices that came from the Indies, and thus they, instead of the Arabs, would become the traders of the world. So he said, ' Do not call it the Cape of Storms,' as Diaz had called it, ' but the Cape of Good Hope.' Till Diaz sailed round it, people thought that the Atlantic Ocean and the Indian Ocean were quite separate ; but Diaz showed them that they could go easily by boat from the one to the other. The Cape of Good Hope is such an important cape that it is sometimes called *The* Cape.

A year or two after Columbus had discovered America, Vasco da Gama was sent with three ships to go round the Cape of Good Hope, and find out exactly the way to India. He sailed from Lisbon in the beginning of July, 1497, and arrived at the Cape Verde Islands at the end of the month. Then he sailed right across the open ocean straight for the Cape of Good Hope, and after three months saw the land a little to the north of the Cape. He sailed along the coast, and at last got round it, and began to sail eastward and northward. By Christmas Day, or Christ's 'Natal Day,' he had reached a place which was therefore called Port Natal. They still went northward, and noticed, as they went, much larger and finer trees than they had seen before.

On March 1, 1498, they reached Mozambique, where they found Arabs who had come for trade southward along the east coast. As they went north, they met more and more Arabs, who were not very pleased to see them, for they knew that if the Portuguese ever came that way once, they would be able to come again, and would be able to carry the spices all the way by boat to Europe. This would be a great saving, for the Arabs had to sail up the Red Sea or Persian Gulf, then take their goods out of the boats, and carry them across the land to the boats which were on the Mediterranean Sea. It was difficult to carry things across the land, even for a little distance, for there were no roads; so only very valuable, and small or light things, like spices, were carried. Of course, there was very little

trade between one part of the world and another. But, difficult as it was, all the trade between the Indies and Europe had to pass through the land the Arabs ruled, and the Arabs were very important people. That would all be changed if people came round the Cape, so of course the Arabs were not pleased to see the Portuguese. But that did not prevent Vasco da Gama and his men going on past all the Arab towns, even to Zanzibar and Mombasa.

It had been growing warmer and warmer as they went north. At last, when they were near the Equator, on April 22, they left the land behind them, and sailed out across the sea to India, which they reached in a little over three weeks. They stayed in India till October, trying to make friends with the natives of India, and to get some cinnamon and cloves and other spices to take back, in order to show that they really had been to the Indies. Then they sailed back, but, instead of taking three weeks to go back to Africa, they took three months, because at first the winds were against them, and then there were no winds at all. They would have taken even longer, but a wind in the right direction came at last, and helped them to go westward.

They sailed as quickly as they could, and passed round the Cape on March 20. In little more than a month they reached the Cape Verde Islands. You remember they took three months to go from these islands to the Cape, but from the Cape Verde Islands the fastest vessel took two months and a half to

sail back to Portugal, though it had taken less than a month to sail from Portugal to Cape Verde.

When Vasco da Gama returned, he was greatly honoured, because he had really found the sea-way to the Indies.

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Africa.

Relief.—Look again at a physical map of Africa, and notice that the shape is something like the shape of North America or South America. You may remember that in these continents there is high ground all down the west coast, there is some high ground on the east coast, and there is low ground between the two. But you will notice that in Africa there is very little green on the map at all. That means, you know, that there is very little low ground. There is a great deal of high ground in all the south and east; there is a smaller piece of high ground on the north-west—the Atlas Mountains—while between them the ground is lower, but not low.

The Atlas.—Measure the length of the Atlas Mountains; measure their breadth where they are broadest. You will see this piece of high ground is about twice as long as Great Britain, so even the Atlas is a large stretch of highland. It is highest on the north and on the south, and there is a plateau in the middle. At each end the plateau is so low that it might be called a plain.

High Ground on South and East.—You can now see how very large the piece of high ground on the

south must be. It stretches right across the whole of the south of Africa ; it is broader than the high ground on the west of North America at its broadest. This broad piece of high ground is a plateau, and, like the plateau of Brazil, it is highest on the south-east. If you were to take a train from Durban, or Port Natal, and go inland, you would see at first flat land on either side of you ; then you would pass through rugged hills gradually up on to another flat plain ; again you would cross this, and go through hills to a third plain a little higher than the others. If you were to leave the train, you could continue westward to the Drakensberg Mountains, which are really the edge of the plateau. If you climbed up and up, you might look back from the top and see the whole of Natal, as the land is now called, stretching away and away to the sea ; you would see the green rolling hills and valleys and plains ; and if you were very lucky, you might even see the glint of the ocean, nearly two hundred miles from you, right on the horizon.

When you were once on the top of the high ground, you would find it very flat, though there are a few bare hills in some parts. The land would slope away to the north-west. You remember that the Brazil Plateau slopes gradually down to the low ground of the Amazon, but in South Africa there is no low ground ; there is high ground along the west as well as along the east, and the lowest part of the plateau is in the centre.

The eastern edge remains high as you go north,

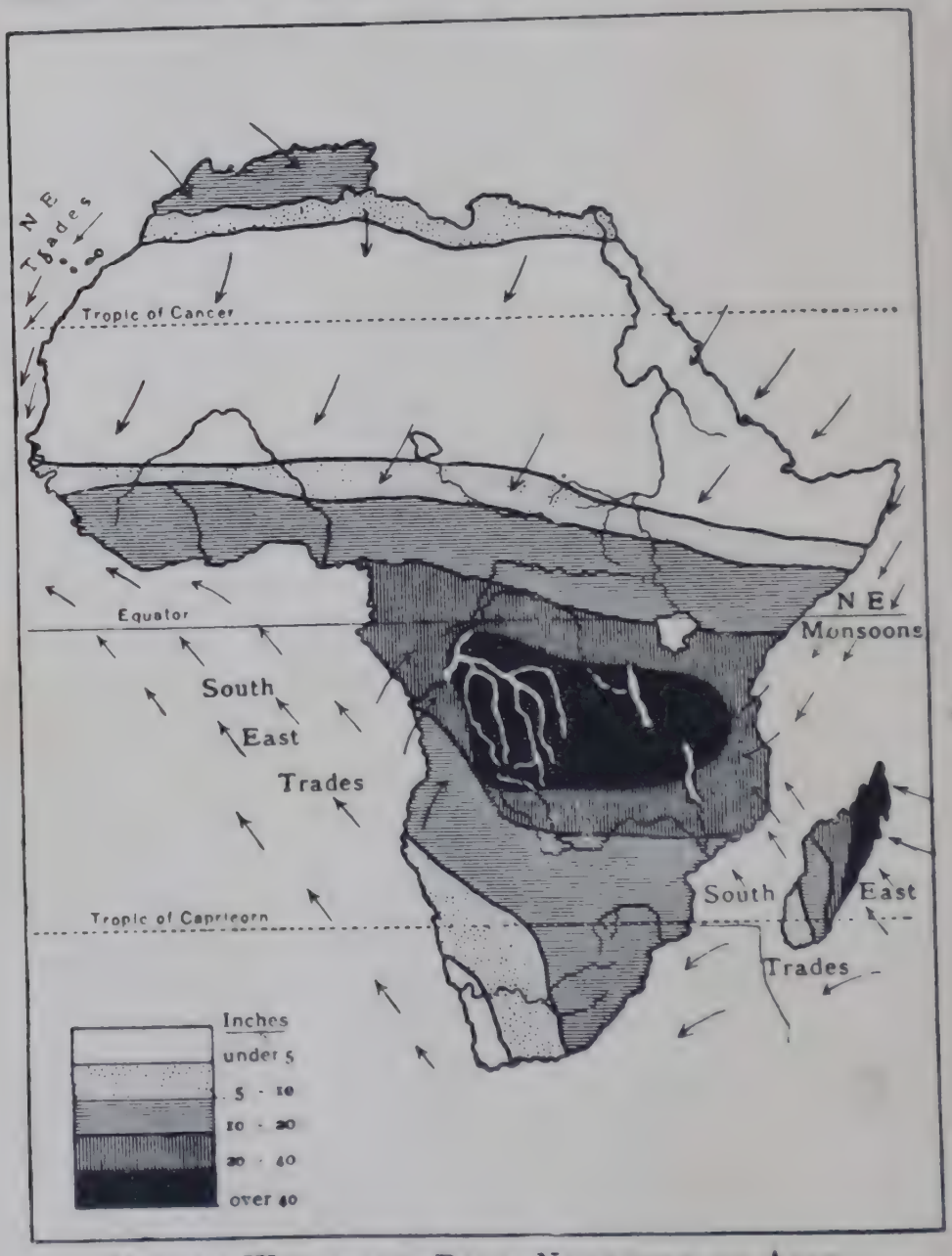
and there are some very high volcanoes near the Equator—Kenia and Kilimanjaro. The mountains of Ruwenzori are so high as to have snow and ice on them all the year round. Farther north still are the Abyssinian Highlands.

The Lower Ground.—There is very little low ground. Most of it is round the coasts and just south of the Atlas Mountains. Notice that at the east end of the Atlas part of the low ground is below the level of the sea, and that the sea flows over it as the Gulf of Cabes. Elsewhere the ground is all higher than most of the tops of the hills in the south-west of England, but very little of it is as high as the high ground in Wales or Scotland.

Winds and Rainfall.—You remember that the winds called the North-East Trade winds helped to take Drake to the south of South America, and that they helped to take Columbus to the West Indies; and you have seen that Vasco da Gama went from Lisbon to the Cape Verde Islands in a month, but took two and a half months to sail back, because the winds helped him to go, but were against him coming back. You know, then, how the winds blow on the north-west of Africa.

You have learned, too, that the South-East Trade winds blow across to South America, and you may have thought that there might be South-East Trade winds on the west of Africa, if you noticed that Vasco da Gama took about three times as long to go south-east to the Cape as he took to come back from the Cape to the Cape Verde Islands.

You may also have thought that, since there are Trade winds on the east of South America, there



AFRICA: WINDS AND RAIN, NOVEMBER TO APRIL.

might be Trade winds on the east of Africa, blowing towards the Equator, as they did over South America.

Look at a map which shows the Equator, and think how they ought to blow.

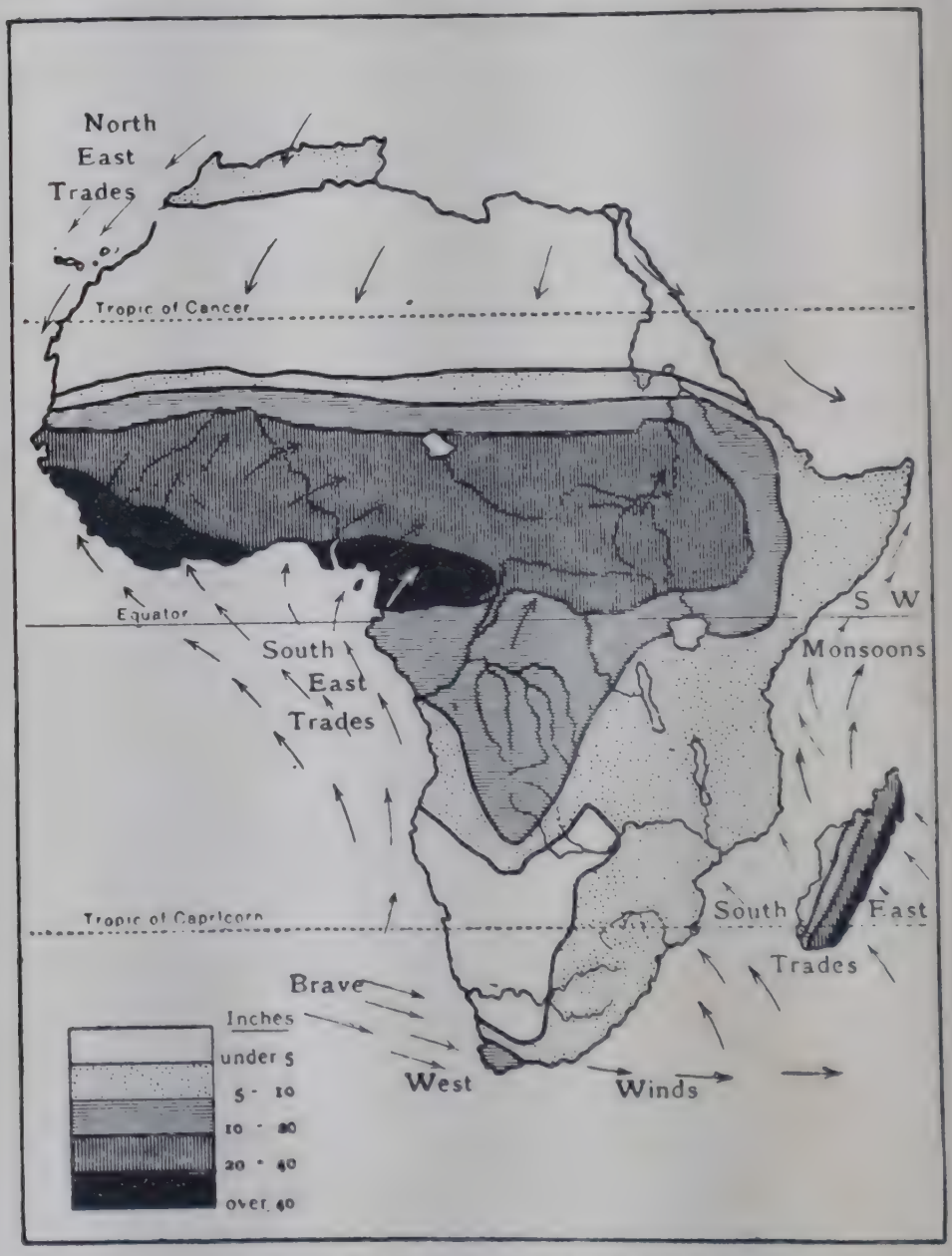
Look now at the map on p. 54, which shows you how the winds blow in the months from November to April. Notice the South-East Trade winds, marked by the little arrows, just where you would expect them. Notice that there are North-East Trade winds also, but that on the east of Africa they are not called Trade winds, but Monsoons, and that they come south of the Equator.

You remember that the north of North America and the south of South America have west winds blowing from the sea. Africa does not stretch so far north as North America, nor so far south as South America, so there are scarcely any west winds blowing over Africa ; but just in the very north of Africa, where the Atlas Mountains are, you see that some winds do blow from the west. On the south there are no regular west winds.

Look at the map on p. 56. which shows how the winds blow in the months from May to October. Notice the South-East Trade winds again. They blow much farther north than in the other half of the year, and when they have crossed the Equator, they turn half round, and blow from the south-west. There are no North-East Trade winds except on the north-west. There are no west winds where the Atlas Mountains are, but, instead, there are west winds at the very south of Africa.

You see, then, that the winds are very different in one half of the year from the other.

As the winds change in different parts of the year, of course the rainfall will be different also. From



AFRICA: WINDS AND RAIN, MAY TO OCTOBER.

November to April it is very wet just south of the Equator, where the North-East Trade winds and the

South-East Trade winds meet. From May to October it is very wet north of the Equator, where the South-East Trade winds on the west turn half round to blow straight on to the land. From November to April the west winds bring rain to the west of the north coast, and from May to October they bring rain to the west of the south coast.

On each of the maps there are two spaces left unshaded to show that very little rain falls. There is one little space on the south. All the rain has dropped out of the south-east winds before they reach the west side. On the north there is a great broad space with little rain, because the north-east winds are dry before they reach Africa. They have come over a great stretch of land, not a great stretch of sea ; no water has been evaporated into them, and so no rain falls out. Notice which parts of Africa are dry all the year round.

Rivers and Lakes.—The rainfall maps show us that there is always a great deal of rain near the Equator ; at one time there is a little more than at another, but there is always a great deal. So you may expect to find a great river in Africa near the Equator, just as we found there was a great river in South America near the Equator. In Africa the great river is called the Congo. The Amazon flows east, because the high ground is on the west of South America ; the Congo flows west, because the highest ground is on the east of Africa.

The other large rivers of Africa all have a great deal more water in them at one time of the year than

at another, because there is more rain at one time than at another. The Niger has most water from May to October ; the Zambesi has most water from November to April.

In the parts where there is no rain, you do not expect to find any rivers, but two rivers do flow across the dry parts. The Nile goes north to the Mediterranean Sea, flowing for hundreds of miles without a drop of water going into it. So, instead of growing larger and larger as it goes to the sea, it grows smaller and smaller, and sometimes, when there is very little water to start with, none flows into the sea at all ; it has all been dried up, or been used, before it reaches there. That happens in the dry season—from November to July—when there is very little rain on the high ground where the Nile begins. Usually there is a little water in the river, for the Lakes Victoria and Albert save it up from the wet seasons to the dry seasons. When there is a great deal of rain in the Highlands of Abyssinia, the water comes down the Nile, and floods over on to the low land on either side of the river. It has such a long way to go, however, that it takes more than a month to come from Abyssinia to the sea. The river brings down mud with it, and when it floods over, the mud sinks, and stays behind when the water runs off. This helps to make the land better.

The Orange River in the south has little water from May to November, and where it flows through the land that has no rain, it is quite dry during some of that time. When there is plenty of water, it does

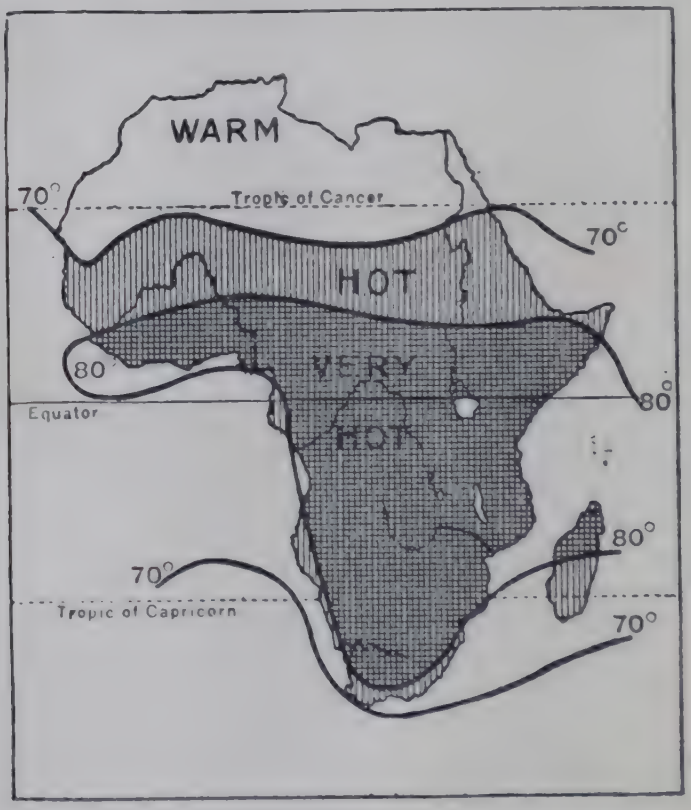
not flood over, for it flows deep down in a gully, which it has worn away below the level of the flat country on either side.

There are some other smaller rivers. There is the Limpopo, south of the Zambesi. Think when there will be most water in it. Some rivers flow from the Atlas Mountains ; the most important—the Majerda —flows to the sea at the east end of the range.

You have learned that some rivers are of use to drain the land, and some are of use to water the land. Does the Nile drain the land or water it ? Most rivers are of use in another way : vessels can sail on them ; where there were no roads, rivers were very important for this reason. The African rivers, however, nearly all have great waterfalls or cataracts near the sea ; these prevent boats sailing far up the rivers, so for a long time people knew very little of the centre of the continent. If people once get past these waterfalls, they can sail long distances on the great African rivers and on the great African lakes, such as Nyassa and Tanganyika and Victoria. Are these lakes fresh water or salt water ? Do you see on the map any lake which seems likely to be salt ?

Temperature.—Africa is different from both North America and South America. In South America it is the south that is cold ; in North America it is the north that is cold. In Africa there is no place that is really cold, except the tops of a few of the very high mountains. Africa is always hot, but it is very hot indeed in the north from May to October, and

very hot indeed in the south from November to April. That is to say, it is what we might call summer in the north when we have summer, and summer in the south when we have winter ; but there is no real winter anywhere in Africa at any time. The

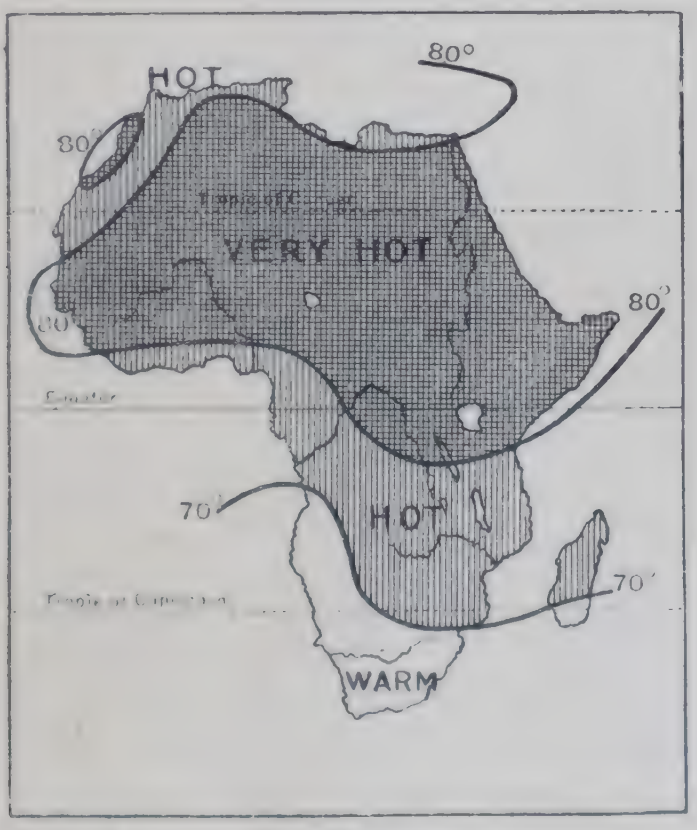


AFRICA : JANUARY TEMPERATURE.

great change is not from hot to cold, but from wet to dry and dry to wet at different times of the year.

Vegetation.—You remember that in the Amazon basin there are great dark forests, because there the trees always have rain. In Africa, in the Congo basin, there is the same kind of thick forest, with tall trees from which the glaring sun is quite shut

out. Under the trees are all sorts of creepers, growing so thickly that it seems easier to travel above the tops of the trees than along the ground. Look at the map, and try to imagine the size of this forest ; you might take months to travel through it, cutting your way through the undergrowth in a dim

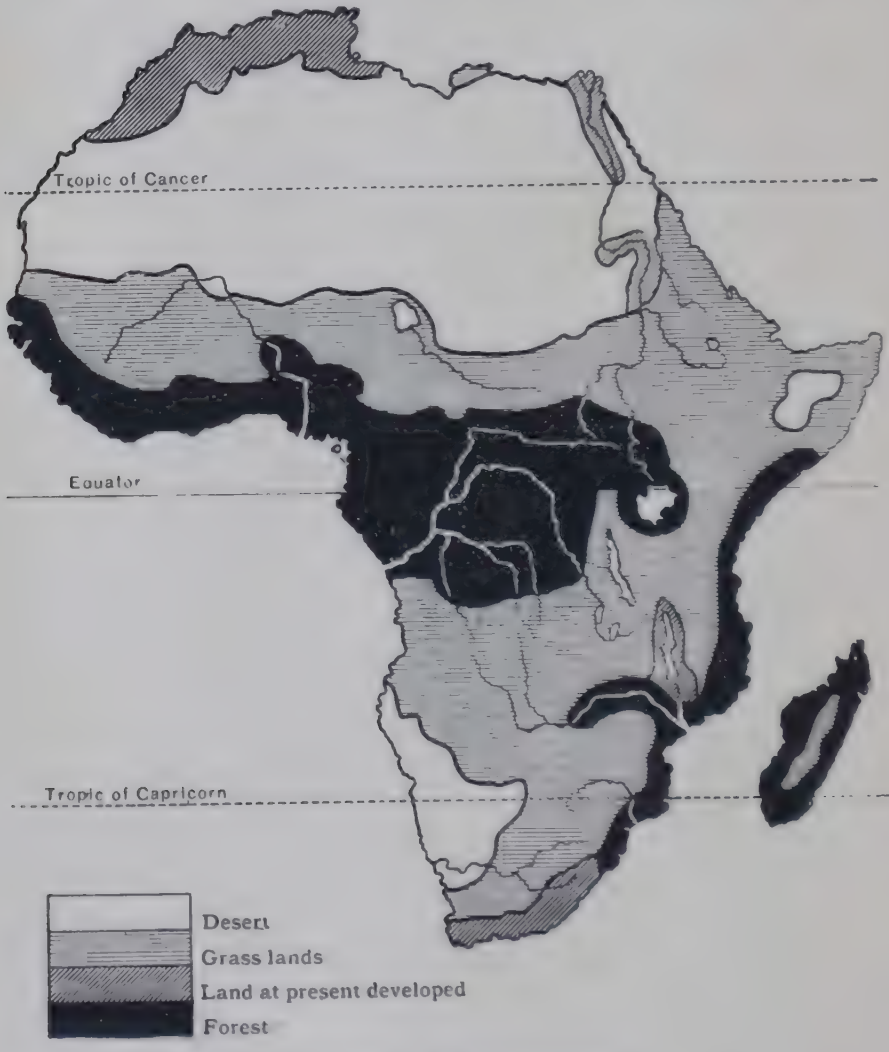


AFRICA : JULY TEMPERATURE.

light, and never able to see more than a few feet in front of you. It is only when you sail up one of the great rivers—the Congo or the Niger—that you can see any distance. Then you see an edge of the forest where the trees come to the water on either bank. Men find it so difficult to pass through the

forest that the only thing it is good for is to provide indiarubber, which is the juice of some of the tall forest trees and creepers.

On the map notice where the grass grows.



AFRICA : VEGETATION.

The grass grows there because during some parts of the year there is not enough rain for forests. Trees require water all the time, but grass can grow just when the rain falls ; then the seeds are formed

quickly, and drop into the ground, so that, when the rain stops for some months, the drought does them no harm, and they are able to grow when the next rain falls. The African grass is not like our English grass : it grows very tall, so that one cannot see over the top of it. On this grass-land there live all sorts of animals that feed on grass, especially deer ; and cattle are kept by the Negroes and other people who live on the grass-lands.

Where there is no rain nothing grows, and there is a desert ; so there is a great big desert in the north, the Sahara. The Sahara comes to the sea south of the Atlas Mountains, and continues as far as Cape Verde ; you remember why the name was given to this cape. There is a smaller desert in the south—the Kalahari Desert. It is not quite true to say that nothing grows on the Sahara. Parts of the Sahara are low ; some of the water from the higher land on each side soaks into the ground, and goes slowly down towards the lowest place. Wherever there are very low places in the Sahara, they may, therefore, be wet ; and in a piece of low, wet land of this kind—an oasis—date-palms may grow. Dates grow best in this way, for there is no rain to spoil the fruit, but there is plenty of water at the roots of the trees.

Now look at the map showing productions due to man's work, and compare it with the map showing natural vegetation.

People and Countries.—As none of Africa is cold, and a great part is very hot, it is not a very

suitable place for White people. The very north and the very south are not so hot as elsewhere, so there are some White people in those parts ; but very few White people live even there. Nearly all those

AFRICA : PRODUCTIONS.

who live in Africa are dark ; some of them are black.

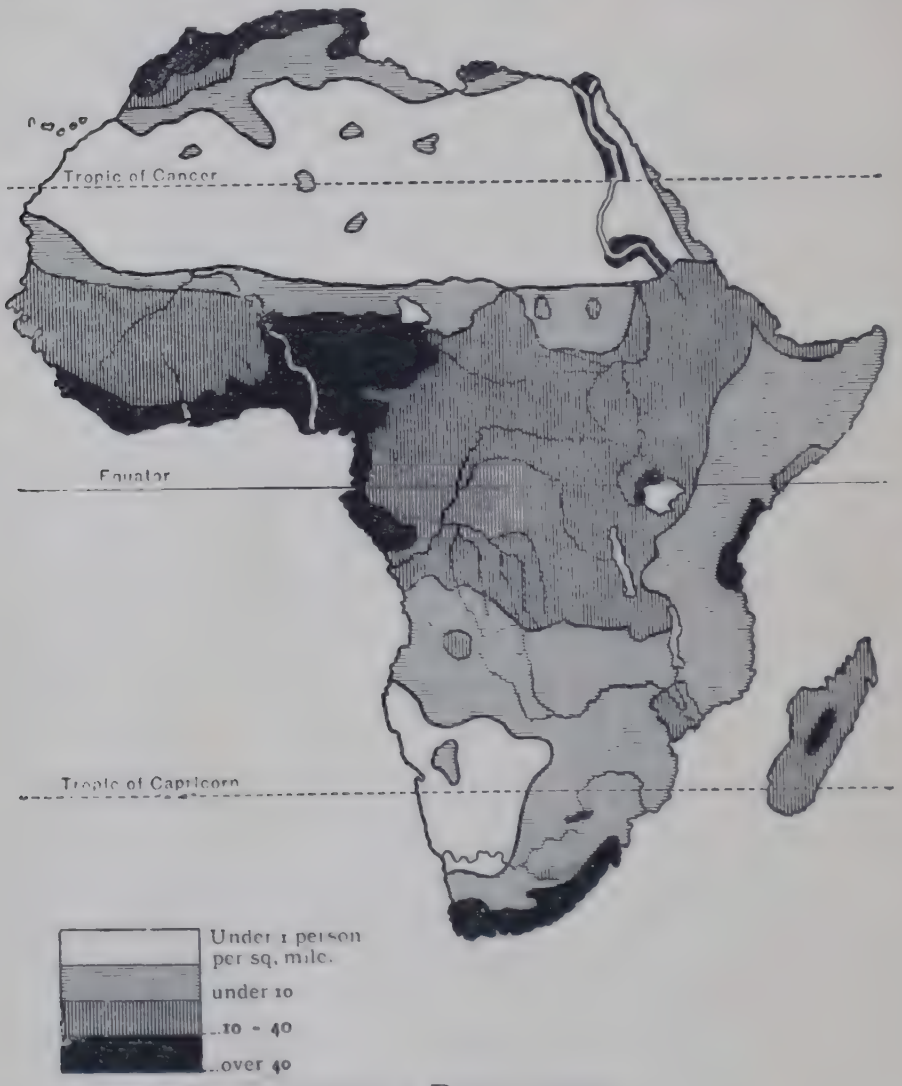
If you look at the map which shows where people live, you will see that very few people live in the Sahara and in the Kalahari Deserts. That is what

you would expect. The people who live there, live in the oases, often wandering about from one oasis to another. There are no towns.

North of the Sahara, on the border of the Mediterranean Sea, some of the people do live in cities. Tunis, just at the end of the valley of the Majerda, is one of the largest towns in Africa ; it is quite an old town, but long ago there was a very much older town—Carthage—not very far from where Tunis now is. It was inhabited by the Phœnicians, who were great traders to all the coasts of the only sea that was known at that time, the Mediterranean. Algiers is another port off this Atlas coast; it too is quite a large town. On the map you will see that a good many people live on each side of the Nile. They live in the valley, just where the Nile water reaches. This valley where the water comes is the real Egypt. On a map you may see Egypt marked a long way west of the Nile, but the real Egypt where the people live, is just the Nile Valley. People have lived there for a very long time ; armies could not come easily across the desert, so the people were able to live in peace and make the most of their land : men cannot fight and at the same time do other work. The largest city in Africa is Cairo, just where the Nile Valley ends and the Delta begins. The next largest city is Alexandria, on the sea-coast at the very west end of the Delta, where the mud from the river does not fill up the harbour.

Egypt is important, not only because things can grow in the Delta and valley, but because just beside the

Delta is the narrow piece of land called the Isthmus of Suez, which for a very long time prevented people sailing from the Mediterranean or Atlantic to the



AFRICA : POPULATION.

Indian Ocean. Till the time of Diaz and Vasco da Gama no one went round the Cape of Good Hope ; people did not know they could do so. They thought they must sail along the Mediterranean Sea,

and travel across the Isthmus of Suez to the Red Sea. Egypt is very near this place where people passed, so for a very long time it has been an important place. After the way round the Cape was found out, not so many people went by the old way for a time. Since the Suez Canal was made, large ships can sail to India and China without going all the way round Africa, and Egypt is now very important again.

The very south is the other part of Africa where there are cities, and these are not old cities, like Cairo and Alexandria. The Sahara kept people to the north of it. The south of Africa was discovered by people going by sea, and even now some of the country south of the Sahara is very little known. Cape Town, just beside the Cape of Good Hope, is the chief city of Cape Colony. White people can live there because it is not too hot, and a good many ships still pass it on the way to the East. The name of the colony shows that the whole land is important just because it is near the Cape. There are other towns not very far away.

Negroes live in the rest of Africa. They usually live in little villages, but just north of the Gulf of Guinea there are some quite large towns. There are more people in Kano than there are in Cape Town; but there are no proper roads, only tracks through the forest and the tall grasses, so these people are rather difficult to get at. It is only where White people have gone that roads and railways have been made and the rivers are used; but Africa is not like North America, where White people can live, and where

there is plenty of room for them. Africa is nearly all too hot for White people, and a great many Black people are already there. The only part of the middle of Africa in which Europeans might live, is the high part of the plateau, where it is cooler; it is along this part that most of the railways are being made.

Marco Polo.

We have now learned how Vasco da Gama sailed round the south of Africa to India, how Columbus discovered America, and how Drake sailed round the world. Since then people have very quickly found out all about the rest of the world. Once they got the idea that they could go nearly all over the globe by sea, it was not so difficult to find out things.

But people in Europe had taken a long time to find out that there were lands that they could reach without crossing the ocean. It was only two hundred years before Columbus lived that a man named Marco Polo, whose home was in Venice, after going to the east end of the Mediterranean by sea, had travelled away and away eastward by land, finding many wonderful places that people in Europe had never heard of before. He had to walk or ride all the way, and took three years and a half to go to Cathay, as he called China.

He had to cross some very high land, where it was very cold, and the fire did not boil water properly; he passed over some high flat land where nothing grew, and then over mountains and through

valleys without seeing anyone. When he went down to the lower ground, even there he found a desert, all hills and valleys of sand, with only a little water here and there. At last he arrived in Cathay, or China, where he stayed for a good many years, travelling from one part to another, and finding out all that was to be known about the land. He found, for example, that the Chinese burned black stones in their fires, and that these fires could be kept alight all night. In Europe at that time only wood was burned in the fires, so he did not know anything about coal till he went to China.

When Marco Polo wished to come back, he found it was too difficult to travel by land over all the deserts and mountains which he had crossed before, so he sailed away by sea. He went south to an island called Java, and then on to another island called Sumatra. There he could no longer see the Pole Star. He had to stay there five months, because winds blew against him from the west all that time. At last he was able to sail westwards to Ceylon and India ; and, after travelling partly by sea and partly by land, he arrived in Venice, when everyone thought he had been dead for years.

The story of his travels helped to interest people in the lands in the East. They began to know more about the world and to wish to see these Eastern lands for themselves. It was the wish to go to the East of Asia that made the Portuguese and Columbus sail out westwards, and in doing that they made the discoveries of which you have already learned.

Asia.

Look at a map which shows you Europe and Asia together ; notice that they are really one continent, not two. Marco Polo was able to go by land all the way to the eastern side. There were mountains, and there was a desert, but it was possible to cross these on foot, and even the desert was not so bad as the Sahara.

Relief—*The Great Lowland.*—There is a great stretch of low ground half in Asia and half in Europe ; notice that it takes up about half Europe and a great part of Asia. Notice how large it is as compared with Great Britain. Most of it is very flat, so that you may travel for days and days and only see a great level grassy plain all round you as far as your eyes can reach. This is the largest piece of low ground in the world.

The High Ground.—All round the south of this low ground is the high ground. In some parts it is very broad ; in other parts it is narrower. It is narrowest just where the low ground comes farthest south. Even then it is difficult to cross, for it is very high. This high part is called the Hindu Kush and the Pamirs. Marco Polo crossed the north of the Pamirs from west to east. West of the Hindu Kush it is wider and lower. This is a plateau with mountains on the edges—the Plateau of Iran. Farther west still the plateau stretches out into the sea as a peninsula, and is called Asia Minor.

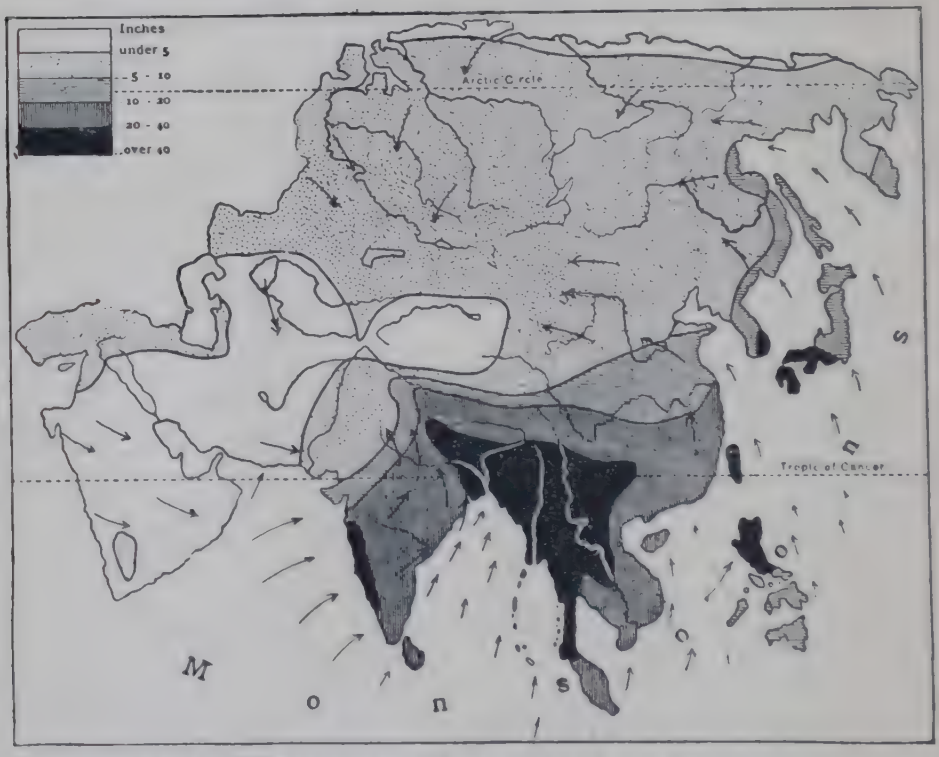
North-east and east and south-east of the Pamirs there is a still greater plateau—the largest piece of high land in the world. The south part of it, called Tibet, is much the highest part even of this plateau. Along the south side of Tibet is the highest mountain range in the world—the Himalayas. All the plateaus have mountain ranges along their edges. At the south-east the southern and eastern ranges come together, and a great many ranges all turn away south-east. As they gradually get lower, they form peninsulas, such as the Malay Peninsula. As they get lower still, the water comes in between the higher parts, and these are left as islands, two of them being Java and Sumatra, to which Marco Polo came on his way home. These are the East Indies.

In the south of Asia there are two plateaus quite separate from the rest of the high ground. The Dekkan is highest along the west side, and slopes down to the east. The Arabian Plateau is highest along the south-west side, and slopes down to the north-east.

The Southern Plains.—Between the Dekkan and the Himalayas is a plain. It is really very big, though it looks small on the map. Measure how long it is. There is a good road running all through it. How long would you take to walk from one end to the other, do you think? Between the Arabian Plateau and the Iran Plateau there is another plain. Part of it is called Mesopotamia.

The Eastern Hills and Plains.—On the east of the great Highland there are a number of mountain

ranges, all running north-east and south-west alongside of the edges of the plateau. Between them there are plains. Some of these mountain ranges are away out at sea, and form islands like the ranges farther south. The islands of Japan are really just mountain ranges, the low parts of which are below the level of the sea. The largest plain on the east

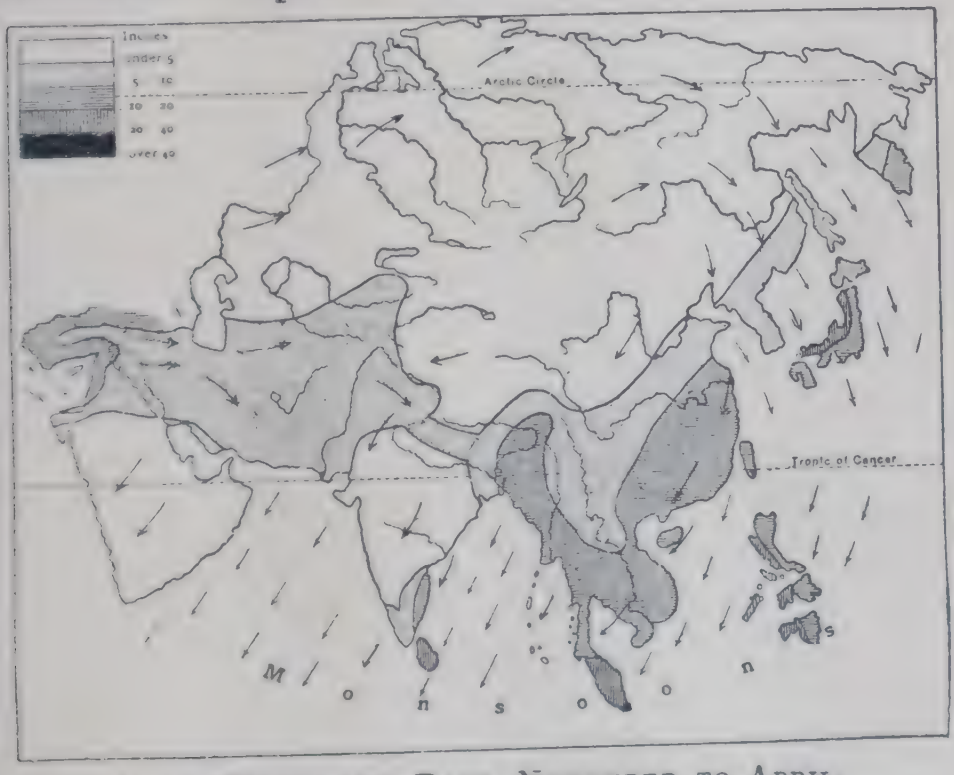


ASIA: WINDS AND RAIN, MAY TO OCTOBER.

is beside the Gulf of Pechili. We shall see shortly how all the plains on the east and south came to be formed.

Winds and Rain—*Winds.*—When we looked at the wind maps of South America and North America, we saw that the winds generally blow in the same direction during the whole year. The Trade winds blow

to the Equator from the east; the westerly winds blow rather towards the poles. On the wind maps of Africa we saw that the winds did not remain quite the same during the year. Cape Town has west winds only from May to October. The north-west, or Barbary region, has west winds only from November to April.



ASIA: WINDS AND RAIN, NOVEMBER TO APRIL.

In Asia the winds blow quite differently in summer and in winter. Look at the map for summer, and notice that the winds all blow into Asia from the south and east and north and west. They do not go straight in, but curve round, always to the left of the direction in which they are going. When Marco Polo was coming back by sea, he had to stay

in Java for five months because the winds were against him, and he had to wait till they changed. In winter-time the winds do just the opposite: they all blow out from Asia to the north and east and south and west, and they always turn to the right as they come out. The winds blow from Africa to India in summer, and from India to Africa in winter. Vasco da Gama sailed quickly in three weeks to India, because he went in early summer; but he took three months to sail from India to Africa on his way back, because he tried to return before the winds changed. These changing winds are called Monsoons.

Rain.—Now, you know that when the wind comes from the sea, it brings rain; when the Trade winds blow on to South America, they make it wet. Since they blow up the Amazon Valley all the year round, they make that part wet all the year round. But as winds blow into Asia only in summer, we may expect that summer is the time when there is most rain in Asia.

If a saucer of water is left in cold weather, it does not evaporate nearly so fast as it does in hot weather. The cold Arctic Ocean does not evaporate nearly so fast as the warm oceans on the south, so that the winds from the north are not nearly as wet as those from the south. All the south of Asia has a great deal of rain in summer, and the north has a little.

In the centre of Asia it is very dry, because Asia is so big, and because the winds have had such a long way to go, and have had to go over such high ground, that all the rain has been dropped before they reach

the centre. Even the west of Asia is dry, because the winds have not come from the sea, but from Africa, and have dropped nearly all their rain before they reach Asia.

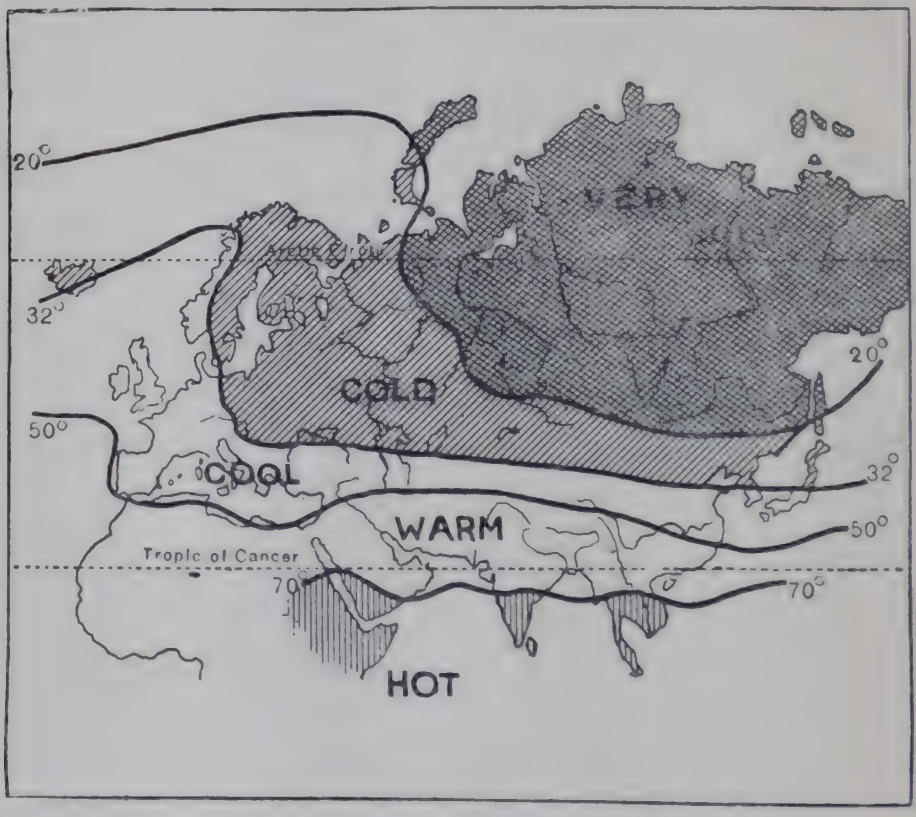
In winter-time, when the winds are all coming out from the centre, where there is, of course, no sea, they are dry winds, and there is very little rain anywhere in Asia. It is only when they do cross a part of the sea, such as the Bay of Bengal, and then come to some more land—for instance, the south of India—that they bring any rain at all.

So you see that during half of the year nearly all Asia is dry, and during half of the year a good part of Asia is wet.

Even in summer some parts of India get more rain than others : the map shows you that the west of the Dekkan and the south-east of the Himalayas get a great deal of rain, while the north-west of India gets very little. The west of the Dekkan is very rainy, because the winds come straight from the sea against the steep side of the plateau, and have to go up to colder levels, so that the rain comes down, and there is less left for the plateau itself. The south-east of the Himalayas is wet because the winds come straight from the sea also ; but the north-west of India is dry because the winds have come over a great stretch of land before they reach there.

Temperature.—Asia is all north of the Equator, but it is so large that some of it is quite near the Equator and some of it is very far north, so that some of it is hot all the year round, and some of it

is cold all the year round; but in summer it is very hot indeed in the south and west, and in winter it is very cold indeed in the north and east. In the middle it is hot in summer and cold in winter. You will remember this is exactly as it is in North America; only in Asia it is very much colder in the

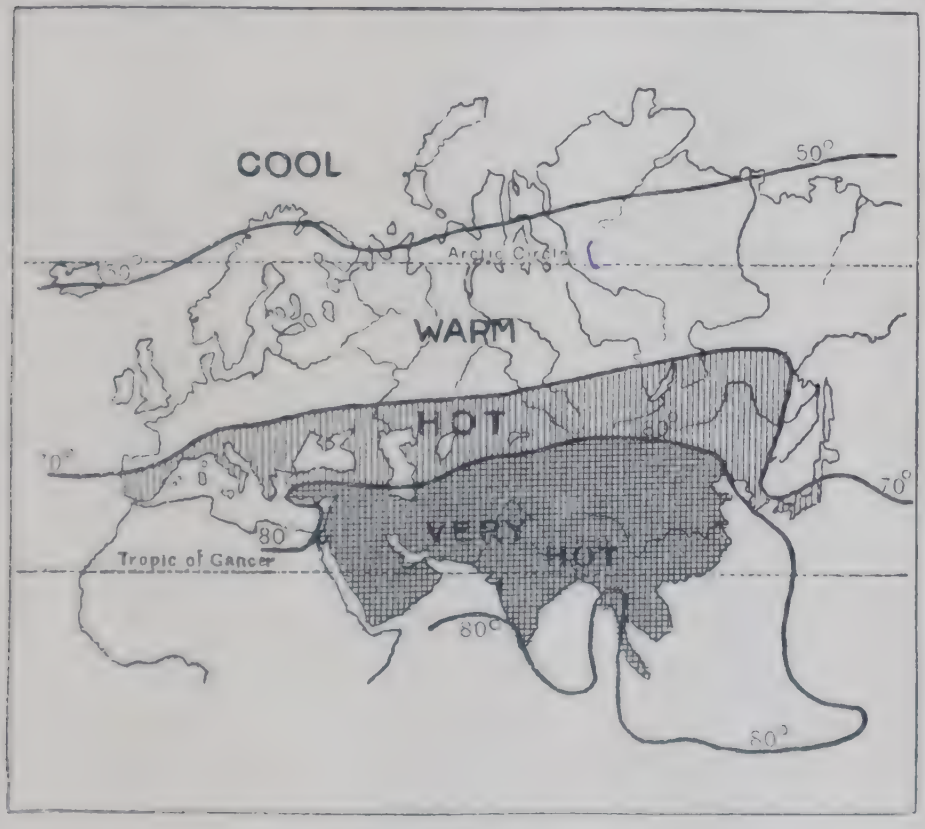


Asia: January Temperature.

north-east during the winter, and it is very much warmer in the south-west during the summer.

Then Tibet is so high that it is not only very dry, but it is very cold. The highest parts of the mountain ranges on the edge, such as the Himalayas, are colder still, so that there is snow on them all the year round.

Rivers and Lakes.—Look at the map of Asia, and notice that nearly all the rivers come from the edge of the plateaus on the east and north. From Tibet the Syr Daria and the Amu Daria flow west; the Indus and Ganges and Brahmaputra flow south; the Irrawadi and Menam and Mekong to the south-



ASIA: JULY TEMPERATURE.

east between enormously long high mountains. The Sikiang and the Yangtsekiang and the Hwang Ho flow east. From the north part of the plateau the Amur flows east; and the Obi, Yenisei and Lena flow north and west.

Only two long rivers flow from the western plateaus. They are the Tigris and Euphrates,

which flow into the Persian Gulf between the Plateau of Iran and the Plateau of Arabia through the lowland of Mesopotamia, which means 'the land between the rivers.'

As there is a great deal of rain in summer and very little in winter, you would expect that the rivers would have much more water in them in summer than in winter. On the very high ground it is not rain that falls, but snow, and snow does not run off into the rivers like rain. It stays where it has fallen till there is such a thickness of snow that the bottom layers have been squeezed together into ice.

Then the ice begins very slowly to slip down the sides of the mountains; it slips down first into the valleys, and then slowly slips farther and farther down till it reaches a part which is warm enough to melt it. These slipping masses of ice are called glaciers. The melted snow from the glaciers forms rivers, which keep flowing whether there is rain or not. In summer, when it is warm, the snow and glaciers melt much faster than they do in winter, so that not only is there more water in summer because most of the rain comes then, but there is more water from the melting snow. It is in summer that the Indus and the Ganges bring floods to the plain on the south of the Himalayas; the Irrawadi brings floods to Burmah; and the Hwang Ho and the Yangtsekiang bring floods to the plains of China.

In the north the low land along the coast of the Arctic Ocean remains frozen while the upper parts

of the Rivers Obi, Yenisei, and Lena have melted. The ice keeps the water back for a little, but the water at last breaks up some of the ice, and spreads over the frozen land, forming swamps of ice and water.

Look at the rainfall maps, and think when the Tigris and Euphrates have most water.

Notice that some of the rivers spread out to form lakes, and some lakes do not overflow again. Which lakes do overflow, and which do not? What else can you tell about those lakes?

As a great deal of water falls on the south, the great rivers which come down from the high ground have brought a great deal of fine mud with them; and when the river stops flowing fast, the mud sinks to the bottom, and gets washed back by the tide. Also, when the floods come and the rivers overflow, some of the mud is left on the fields. Now, after a long, long time the Ganges and Indus have brought down so much mud that what used to be a strait between the Dekkan and the Himalayas is all flat land, and, because it was all made of mud, there is scarcely a stone to be seen on it.

In the same way the Hwang Ho has filled up a good part of what used to be a sea on the east of Asia, and turned it into a plain. The Hwang Ho means the "Yellow River," so called because it brings down so much yellow mud, and it makes the sea so yellow that the part into which it flows is called the Yellow Sea.

The Tigris and Euphrates have also brought mud

down from the high land and filled up a good part of the Persian Gulf.

Vegetation.—You know that where there is no rain, nothing will grow, so in the centre of Asia there is a part where very little will grow, because there is little or no rain there. The winds coming from Africa do not bring rain, so even the south-west of Asia, Arabia and the Iran Plateaus, is mostly desert. In the north, where it is very cold, only mosses will grow ; you remember it is the same in the north of North America.

South of the part where it is so cold, forests of pine-trees can grow, just as they do in North America; and then, just as in North America again, south of the forests there is a grass-land, where people are now beginning to grow wheat. Cattle are also fed on the grass, and butter is made from their milk.

The east and south are both wettest and warmest, so that it is there that things grow best. The only part of Asia through which the Equator goes, is the Archipelago of islands—the East Indies—in the south-east. It is only on these islands that forests are found like those on the Amazon and Congo ; and, of course, they are not nearly so large. On each island there is, as it were, a piece of what would be a great forest if the islands were all joined together to make a large piece of land.

In India and China, too, all sorts of things can grow. At one time, no doubt, there were either forests or grass-lands all over them, but people have been there so long that most of the land is now

cultivated. On the south side of the Himalayas and on the west side of the Dekkan, where the winds bring so much rain, there are still dense forests. Some parts have been cleared, and tea is grown. Tea is also grown on the hill-slopes in Ceylon and China. You remember there are a number of hills in South China. It is on these hills that most of the China tea is grown. The North of China is too cold in winter for the tea-plants. On the lower ground the people grow wheat where it is drier, and cotton and rice where it is wetter ; but all sorts of other things are grown for food. There is not quite enough water in the country through which the Indus flows, so the Indus and its tributaries are used to water the land.

Spices, you remember, came from the Indies, and they still come ; but it does not take much land to grow all the spices that are used in the world, and plants necessary for ordinary food take up much more land.

If you were to sail up the Ganges to Calcutta, you would see first the green swamps on either side of the channel ; small palm-trees would be noticed here and there, and farther upstream there would be a few low huts. Though you would not see tigers, or deer, or boars, you might notice the marks they had left on the mud, and you might even see crocodiles slipping down into the water as the boat came near them. By-and-by you would come to the great city of Calcutta, with all sorts of steamers and sailing ships in the river beside it.

Then, as you went on by road or train, as far as you could see there would only be an immense plain, quite flat, and dotted with trees. Villages of mud-huts would appear at intervals in the middle of fields of poppies, potatoes, castor-oil plants, indigo, barley, and other grains used for food, while herds

ASIA : PRODUCTIONS.

of buffaloes would be seen eating the grass. In one part there would be wells, from which they get water for the fields in the dry season ; in another muddy ponds or channels. A great deal of what you would see, would not be interesting ; you might even think the land ugly, but it is a land where people can grow

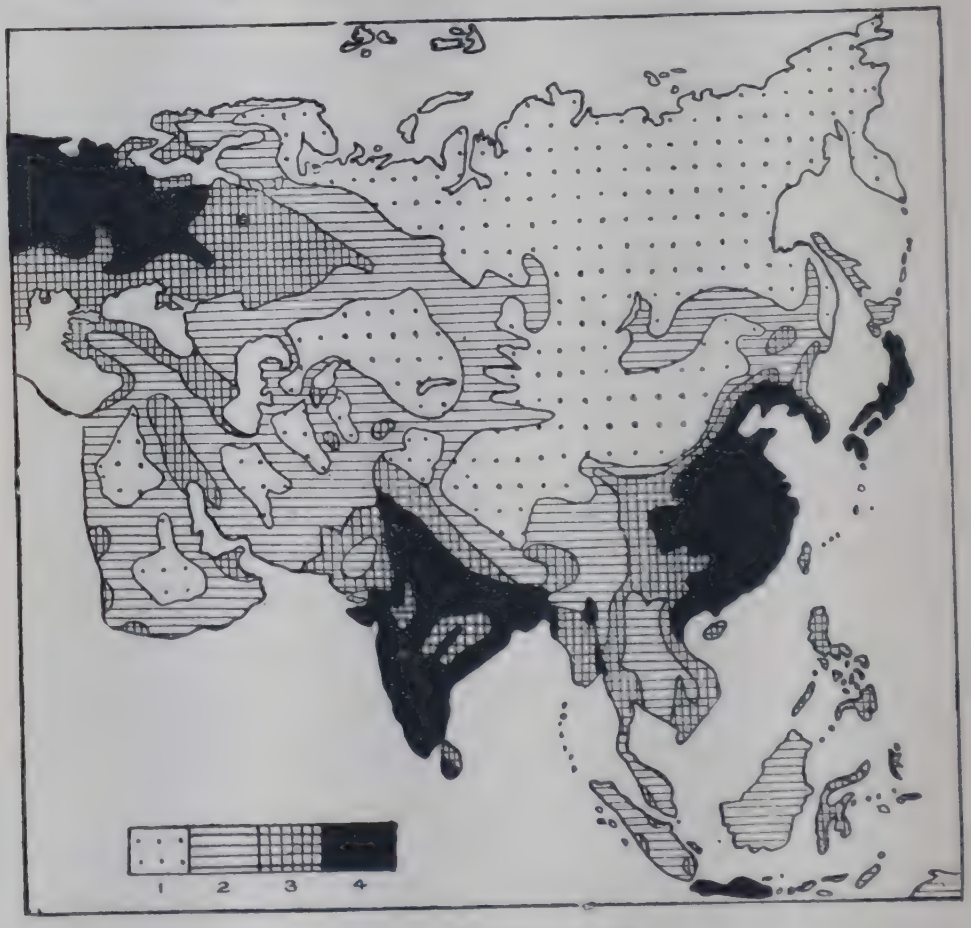
things and live; and away on the north of the plains you might see sometimes, when it was clear, the snowy peaks of the Himalayas far off, shining white in the sun.

People and Countries. — You might think now where it would be likely that most people would live. Perhaps we might find out first where they do not live. They do not usually live where it is very cold, or where it is very dry, for in those places nothing will grow, and so it is very difficult for people to get food. Of course, food might be brought from other places, but it costs money to bring food, so that in such places food is dearer. Now, in the north of Asia it is cold, and in the centre and west of Asia it is dry, so very few people at present live there.

Also, people do not live where it is so wet that great forests grow very quickly. Very few people live on the low ground beside the Amazon or beside the Congo, because of the great deep, dark forests. In Asia comparatively few people live on the islands of the East Indies—except Java—for there, as we saw, are the only parts of Asia which correspond to the forest-lands of the Amazon and Congo.

The districts in which people live, are those south and east of the high dry parts. We know that one of these is called India, another China, and the third Indo-China—that is, the part between India and China. A good many people also live in Japan. In these parts nearly half of the whole number of people in the world live, and there are great cities as big as those in Britain. But even

in India and China more people live in one part than in another. In India most people live on the low land through which the Ganges flows, between the Himalayas and the Dekkan, for there it is



ASIA: POPULATION.

(1) Less than 1 person per square mile; (2) 1-50; (3) 50-100; (4) over 100.

warm and wet, and plenty of food can be grown. The land through which the Lower Indus flows, is all desert; notice that the Indus does not have any tributaries in its lower course, because there is no rain. Here, of course, people do not live. A little

way from the mouth of the Ganges is the city of Calcutta, to which ocean steamers may bring their cargoes of goods from Europe, and from which they may take rice and tea and other things to Europe. Bombay is another large city on the coast—in the west. Passengers and letters go through Bombay to a great part of India, because it is nearer to Europe than Calcutta is ; but it does not pay to take heavy things to the north-east of India over the high plateau of the Dekkan, so heavy things for that part go through Calcutta. Notice that a good many people live near the south of India, where the land is lower on the east. There is the third large city of India—Madras. There are other towns and cities in India, but most of the people live in villages.

In China, as in India, more people live on the low land than elsewhere. The largest number live on the great plain of North China, through part of which the Hwang Ho flows. You remember that the Hwang Ho brings down yellow mud. This mud is so fertile that yellow is the national colour of the Chinese. Just at the north end of the plain is Pekin, or the 'North Capital.' At the south is Nankin, or the 'South Capital,' because this for a long time was the most important part of China.

Another important part of China is the low ground beside the Yangtsekiang. Near the mouth of the river is the city of Shanghai, and a long distance up the river is the city of Hankow ; but the river is

so broad and deep that a British battleship has sailed up to Hankow. Find out how far this is.

In the south a great number of people live in the Valley of the Sikiang. Till a very short time ago, people going to China had to go by sea, and the first place they came to where they could get easily into the country was the mouth of the Sikiang, so it is no wonder that here a large town has grown—Canton, one of the largest towns in China.

Most of the cities about which you have learned are where there is a good climate, and where people can live most comfortably. The most important of them are also at places which people can easily reach. New York and New Orleans, and Montreal and Buenos Ayres, are where people can easily go into North America and South America. But some towns are on ways along which people must pass if they are to go from one important land to another, even though these ways go through places otherwise not very pleasant.

Before the way round South Africa was discovered, everything that was carried between the Indies and Europe, had to be taken across the narrow piece of land between the Mediterranean and the Red Sea or the Persian Gulf. This piece of land is desert; but, just because people had to pass through it, it was, and still is, important. In the Middle Ages people did not use the Red Sea, but took the spices into the Persian Gulf, then carried them overland on the backs of camels by the side of the Euphrates to the place where that river comes very near to the

Mediterranean, and there they crossed over to the sea by the town of Antioch. Now the Suez Canal is made between the Red Sea and the Mediterranean Sea, and great steamers can go through it, so there is far more trade, and towns have grown at each end of the canal. There is also a town at the south end of the Red Sea—Aden. It is a very hot and very dry place, but these great steamers require coal, which is taken there for them, and so Aden is an important place.

Why Europe and Asia are counted as Different Continents.

We have seen how Drake sailed round the world, and how, before that, Columbus sailed across the Atlantic, and how within a few years the Spaniards discovered North and South America. We have seen how, almost at the same time, the Portuguese sailed round the south of Africa, and found the way to the Indies. We have seen that only two hundred years before that time Marco Polo had found a land-way to China. All these people who made these discoveries, came from Europe—from Venice, Genoa, Spain, Portugal, and England; but there was a time, long before, when all these places were themselves discovered. It was the Phœnicians and the Greeks who made the first discoveries, not the Italians and Spaniards.

We have just seen that the part of the world near Arabia and Egypt and Asia Minor is important because ways go through it from one place to

another; and ever since there was any history, this part has been important. The Phœnicians lived at the east end of the Mediterranean Sea, and explored it. They built Carthage, near where Tunis now is; they may even have gone through the Strait of Gibraltar and sailed north as far as Britain. It is so long ago that we do not know the names of the men who went first, as we know the names of Columbus and Drake. But whoever did first sail out of sight of land was a brave man—as brave and clever as Columbus himself was.

The Greeks also were civilized when the other peoples of Europe were almost savages. If you look at the east of the Mediterranean Sea, between Asia Minor and what is now called Greece, you will notice a sea with a great many islands, and a larger island—Crete—at the south. All round this sea were the lands where the Greeks lived. They called the sea the Archipelago, which means the 'chief sea,' because it was the chief sea known to them. There are so many islands in it that nowadays we use the word 'archipelago' to mean a collection of islands.

It was the Greeks who first used the names 'Asia' and 'Europe.' 'Asia' means the land of the 'rising sun'; 'Europe' means the land of the 'setting sun.' To the Greeks who sailed on their chief sea, the sun rose over the lands away in the east, and these lands they called Asia; to them, too, the sun set over the lands away to the west, and these lands they called Europe. Then gradually

all the land behind that which they saw to the east, was called Asia; and all the land which was gradually discovered behind that which they saw in the west, was called Europe. That is one reason why Europe and Asia, though really one continent, are called by different names.

By-and-by the Greeks sailed westwards on the Mediterranean, and, like the Phœnicians, settled on islands and other convenient places along the coast, such as Sicily and the south of Italy. Later on, the Romans explored all the land westwards, and Julius Cæsar even reached Britain after he had marched with his armies right across what is now called France.

So Europe gradually came to be civilized. We shall now see what kind of land Europe is: we shall see why it is so important, though it is so small compared with the other continents, and then, perhaps, you may find out why the people have gone on to discover the rest of the world.

Europe.

Relief—*The Plain.*—You have seen that a great part of the east of Europe is low ground—part of the greatest plain in the world. It really stretches westward a good distance, but part of it is so low that it is just below the surface of the water, and the Baltic Sea and the North Sea have been formed. They are very shallow—really parts of the plain. All along the shores of these seas there is some land—as in Denmark and North Germany and South Sweden

—which is just above the level of the water. Even the east of England is really part of the plain.

The High Ground.—Notice that there is some high ground in Scandinavia, north-west of the Baltic Sea, and in the north of Scotland. Most of the high ground of Europe is, however, in the south ; but, if you compare it with the high ground of Asia, there is not very much of it, and it is not very high. The largest piece of high ground is in the south-west—the Iberian Plateau. On the north of the plateau are the Pyrenees, and on the south are the Sierra Nevada. Where is there another Sierra Nevada ? What does the name mean ?

The Alps and the Carpathians are other great broad stretches of high ground in and near the south. The Alps are not nearly so high as the great mountains in the other continents we have learned about ; but, considering the small size of Europe, they are high and broad and long. Measure the breadth and length of the Alps, and compare these distances with some distances in Britain. The greater part of the Alps is over a mile high, and some of the highest parts are about three miles high. Compare these heights with the breadth ; then compare the Alps with the Himalayas.

If you stand well back from these mountains, they seem to rise straight up, and they do rise very steeply. Long ago there were probably no valleys, and the Alps were a great mass of high ground rising up steeply from the low ground on each side, but such a quantity of rain has fallen on this high

ground, and run down on to the lower ground, that valleys have been formed where the rocks were most easily worn away.

The west end of the Alps turns round to the south, and joins on to the end of the Apennines, which stretch away to the south-east, to the shores of the Adriatic Sea, and then curve round to the west. Sicily is really the end of the Apennines, separated from the rest by a part which is low enough for water to flow over it—the Strait of Messina.

From the east end of the Alps also notice that high ground stretches away to the south-east. At the south end, where Greece is, the water has flowed over all the lower parts, and only the high parts stand out of the water as islands—islands in which Greeks still live. Asia Minor is really the same high ground rising out of the water on the east.

Look at the Carpathians also, and notice that they do not quite join the Alps on the west, but that there is a piece of lower ground between. Notice also that at the east end they join on to the Balkan Mountains.

North-west of the Alps and Carpathians there is some land which is rather high, though it is not nearly as high as the Alps. On this higher part are some small mountain ranges : notice exactly where these are, especially the Jura, the Vosges, the Black Forest, the Bohemian Forest, the Erz Gebirge, and the Sudetes. In between the Alps and the Pyrenees is a smaller plateau, called the Cevennes, with a very steep front on the south and east.

The Southern Plains.—Between the Iberian Plateau and the east end of the Pyrenees is the Plain of Aragon, while between the Iberian Plateau and the west end of the Sierra Nevada is another plain—the Plain of Andalusia. Between the Pyrenees and the Cevennes is low ground. Between the Cevennes and the Alps is a long narrow strip of low ground—the Rhone Valley. Between the Alps and the north of the Apennines is the Plain of Lombardy ; it is really just the end of the Adriatic Sea, which has been filled up with mud brought down by the River Po. The Plain of Hungary is low ground, with the Carpathians on the north and east, the Alps on the west, and high ground also on the south. The Plain of Thrace is south of the Balkan Mountains. There is another long narrow plain, the Valley of the Rhine, right in the centre of the high ground north of the Alps. Measure the length and breadth of it.

Now you see that, though Europe is so small, and though the high ground is not so high as the high ground of other continents, yet there are far more small stretches of high ground and low ground than there are elsewhere. One result is that there are far more pieces of low ground for the sea to flood over, and so there are far more peninsulas and islands than in parts of other continents of the same size. Look at South America, and compare it with Europe.

Winds and Rain — *Winds.*—You learned that south of latitude 35°, on the west side of South America, there are west winds, and that in North America, north of latitude 35°, there are west winds.

Africa stretches just as far south as latitude 35°, so there are west winds in South Africa during only one season. Which is it? Africa stretches just as far north as 35°, so there are west winds in North Africa during only one season also.

Now, Europe is north of latitude 35°, so west winds blow over Europe nearly all the time. If you have

EUROPE: WINDS AND RAIN, MAY TO OCTOBER.

been noticing every day for a long time from what direction the wind comes, and if you have counted up the number of days it has come from each direction, you will have found that far more winds come from north-west, or west, or south-west than from any other direction. This has sometimes been an inconvenience to sailors; you remember Drake did not leave the English Channel till a month after

he first started from Plymouth. But you remember that in winter the winds blow out from Asia, and sometimes the east winds from Asia blow right across Europe as far even as England. So do not be surprised if you notice east winds blowing for a number of days, especially if it is in winter or spring that you are noticing the winds.

EUROPE: WINDS AND RAIN, NOVEMBER TO APRIL.

Rain.—When the west winds blow on to the north of North America and the south of South America, they bring a good deal of rain to these parts. Notice from the maps that the west winds bring a good deal of rain to all the west of Europe. Of course, as the winds blow farther and farther from the sea, they have less and less moisture to drop, and there is less and less rain. But there is no great high mass of

land on the west of Europe as there is on the west of South America and the west of North America, so the rain does not drop out of the clouds all at once, and the winds carry some rain far inland. The Spanish Plateau is the highest piece of land on the west, and you will notice that the east of Spain is much drier than the west. It is as dry as the east of Europe.

EUROPE: JULY TEMPERATURE.

Look again at the map which shows the rains in summer, and see that the land along the north of the Mediterranean gets little or no rain then. Most of the rain falls in winter. This is what you might expect, for you remember that the north of Africa gets rain only in winter.

Temperature.—The temperature map for July tells us that no part of Europe is very hot, and no part of

Europe is very cold, though it is hot in the south and east, and cooler in the north and north-west.

In winter-time, as we see from the January map, it is coldest in the north-east and warmest in the south-west. It is freezing over all the east of Europe.

If you look at the temperature map of Europe and

EUROPE: JANUARY TEMPERATURE.

Asia for January, you will notice that it is very cold indeed in the north-east, and that it grows warmer towards the south and west. England is farther north than Japan, and yet the north of Japan is freezing in winter while England is not freezing. This is mainly because the west winds that blow over Europe come from the sea. The winds do not come exactly from the west, but rather from the south-

west. You remember that Columbus came back from the West Indies, which lie to the *south*-west of Europe, by allowing the 'west' winds to blow him back. These winds blow some of the warmer water from the south-west in front of them right across the Atlantic to Europe; so the water round the west and north-west of Europe is much warmer than the water off Newfoundland and Labrador on the other side of the Atlantic. In the Pacific the west winds blow warm water on to the west of North America, and so the water there is warmer than the water on the east of Asia. Then, as the west winds blow on to the land, they not only bring rain, but they also bring some of the heat from the warm water, and make the west of Europe warmer than the east, and the north-west of North America warmer than the north-east.

Rivers and Lakes.—As the west winds are nearly always bringing rain, there are rivers all over Europe, and they are much more steady than are the rivers in places where the rain comes only at one season.

As the east of Europe is a great plain, a broad stretch of flat land, it is in the east that the great rivers are. Look at the Volga, and compare it with the Thames. A long distance from the Caspian Sea into which it flows, it is two or three miles wide, and it has great tributaries flowing into it also. There are other great rivers flowing over the plain. What are their names? Into what seas do they flow? These rivers ought to have boats on them to help people to move about the country, but you remember

that in winter-time it is freezing in all the east of Europe, so these rivers are frozen, and boats cannot sail on them for a good part of the year. Of course, those in the north are frozen much longer than the others are. Then the Volga flows into the Caspian Sea, which has no connection with the great ocean; the vessels which can sail all over the world and carry goods from one port to another, can never enter the Caspian Sea and the Volga. Even the other rivers of the plain flow to seas, such as the Baltic Sea, and the Sea of Azov, and the Black Sea, which boats can enter only through narrow entrances, such as the Sound or the Strait of Kertch, or the Bosphorus and Dardanelles.

The high ground of Europe is in the south, so the rivers that flow southward are short, and generally go too quickly for boats to sail up them. You remember also that there is little rain in summer there, so they generally have little water then. Although these rivers themselves are not very useful, yet their valleys are useful, because they are low ground, and so people can live in them, and make roads and railways along them. The Rhone Valley is very useful, though the Rhone itself is not of much use. Do you know any other valley that is more useful than the river which flows through it?

As the high ground of Europe is on the south, you would also expect that most of the long rivers of Western Europe would flow north, and so they do; but they are not as long as you might expect, for few of them begin on the highest ground of the Car-

pathians and the Alps. They begin rather on the lower highlands to the north-west of these great mountains. The Danube, which begins in the Black Forest, catches all the streams, except one, that flow from the Alps to the north, and carries the water away eastwards to the Black Sea.

The Rhine is the only river that begins on the Alps, and flows to the sea on the north. It flows for a long distance in a deep narrow valley in the Alps, then turns westward, and, after spreading out to form Lake Constance, tumbles over some hard rock in its bed just where it flows over the end of the Jura Mountains. Then it flows peacefully north through the long valley. This is really a plain ; it is not a valley like that through which the Rhine flows in the Alps. Then the river flows through a narrow valley where the hills rise steeply from the water's edge, and out through the flat plains of North Europe to the sea.

Though the Seine is shorter than the Rhine, it is very important. They both flow through flat land, so have not steep parts with waterfalls and rapids. They have rain all the year round, so they do not usually dry up ; they are not frozen in winter, so they can be used at all times ; they flow to the open ocean, and ships can go long distances from them. For all these reasons they are much more useful for ships than any of the other rivers are, but they have another advantage still : there are no tides in the Baltic Sea, or the Black Sea, or the Caspian Sea. It was a good thing for the Phœnicians and Greeks that there are no tides in the Mediterranean also, for they

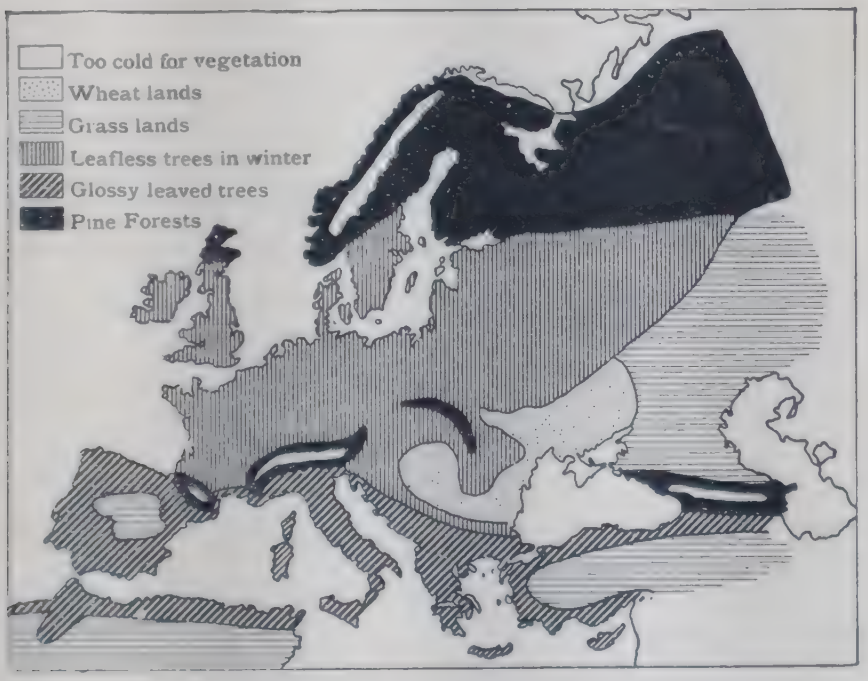
could land anywhere from the small boats that they had then. The tides round the coasts of Norway and Spain are very small ; but all round the coasts of the North Sea and the English Channel and the other coasts of England the tides rise and fall twice a day; the water flows up and down the mouths of the rivers twice a day. The tides thus keep the river mouths clear of the mud that the rivers bring down, so that big ships can sail far inland. Before the days of steamers the tides were useful in another way, for ships could drift up and down with the tide, however much the wind might blow, and however much the river might wind about. It is the estuaries of the British rivers which are so useful ; the rivers themselves are not very useful. But the rivers of north-west Europe are more useful ; ships can not only enter their estuaries, but also sail long distances into the country.

Vegetation.—The very north of Europe is like the very north of Asia and of North America ; it is too cold for things to grow.

When the west winds blow to South America and to North America and bring rain to the land, there are forests, and there used to be forests where the west winds blow to Europe. In the north-east, where it is cold, there were forests of fir-trees with small hard spines instead of leaves, so that they should not easily be frozen. In the south there were trees with thick glossy leaves, so that they should not feel the heat in the dry summer. In the north and west were the trees we know most, whose leaves drop off in

autumn. In the very south-east, where it is too dry for trees, there was a grass-land. Some of it—the part north of the Caspian Sea—was so dry that it was almost a desert.

That is how things used to be long ago. The greater part of Britain was covered with forest, and so were France and the rest of North Europe. But it is



EUROPE : VEGETATION.

different now. In these lands there are only remnants of old forests ; some of the trees have been cut down, and the land has been used to grow things which men require for food, such as wheat and rye, potatoes and turnips, beetroot and cabbages. On some of the land grass grows now ; but if it were left to itself for a long time, gradually trees would come, and grow taller and taller, and gradually the grass

under the trees would die, and it would be a forest-land once again.

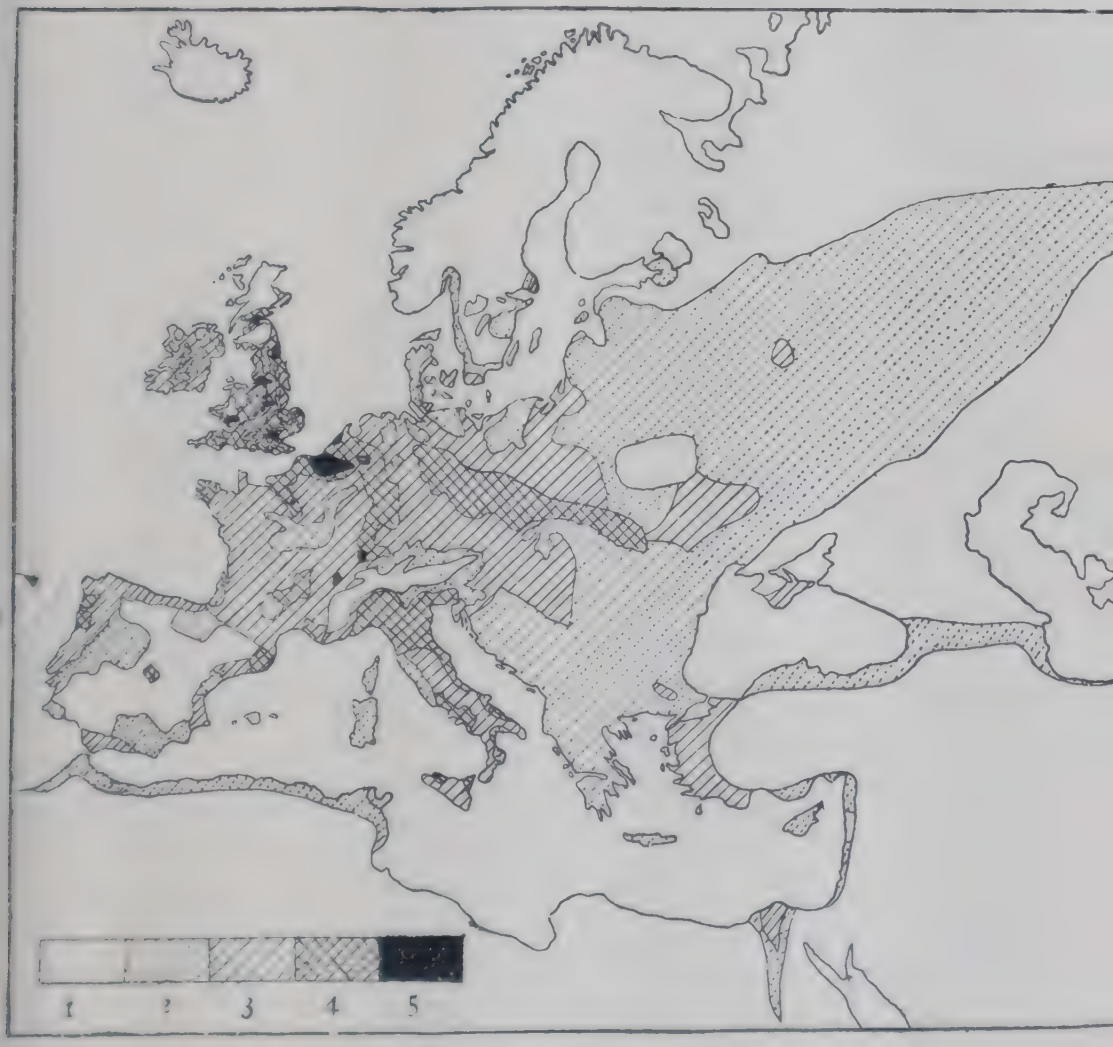
In the south of Europe the rain comes in winter, and there are fine, warm, dry summers, so the lands round the Mediterranean are used to grow all sorts of fruits which require a fine summer to ripen them, and which would be spoiled by rain. There you would see orange-trees and olive-trees, vines, figs, and even dates.

In the south-east the land is being used to grow wheat, just as in the Argentine the land which naturally grows grass is now being used to grow wheat. The fir-forests of the north, and the cold lands where nothing grows, are very much as they always were ; but almost all the rest of Europe has been changed. It has been changed far more than any other continent has been changed.

People and Countries. — Now look at the map which shows where people live. Very few people live in the cold north, where not only is it cold, but so little can be grown for food. Very few people live in the very dry part north of the Caspian Sea, but the rest of Europe has people all over it. We have learned that a great many people live in India and in China, but in no other parts of the world are there so many people all together as in Europe. There are nearly as many people in England as there are in all South America. There are almost as many people in France and Germany together as in all North America.

Though there are people all over Europe, there are

more in some parts than in others. Most people live just north-west of the high ground and in Italy. In the east it is very cold in winter, and fewer people



EUROPE : POPULATION.

(1) Under 64 ; (2) 64-128 ; (3) 128-256 ; (4) 256-512 ; (5) over 512 persons per square mile.

live there. In the south it is dry in summer, and fewer people live in the Balkan Peninsula and in the drier parts of the east of Spain. It is in the parts where there is rain all the year round, where it is not

too cold in winter and not too hot in summer, that most people live. Here, too, there are rivers whose estuaries are open to the tides, so that ships can sail inland. In the old days, when there were no roads anywhere, it was a very good thing indeed for Europe that there was so much water round it, that there were so many peninsulas, and that people could sail so easily from one part to another.

All the time before Columbus discovered America the Mediterranean was the important sea, because it was the sea that was in the middle of nearly all the land that was then known. It was the Phœnicians and Greeks and Italians who were the chief sailors: you remember that Columbus himself was an Italian. The lands on the north-west were not so important, for they were on the outside of the important part. But after Columbus sailed across the Atlantic, and Vasco da Gama sailed to India, and Magellan sailed across the Pacific, and Drake sailed round the world, then people began to see that from these lands one could go anywhere, and Portugal and Spain, France and Holland, Britain and Germany, became important.

On the rivers of these lands, then, there are great ports to which ships can come. Hamburg, Bremen, Rotterdam, Amsterdam, Antwerp, London, Hull, Havre, and Rouen, are all near the heads of the estuaries of these rivers. Name the rivers. Paris, Cologne, Frankfurt, Strassburg, Berlin, and Magdeburg, are a long way inland, and yet ships are able to come to them also.

These lands on the north-west have another advantage. Along the north edge of the highlands coal has been found, and coal is used not only for heating houses and cooking food, but also to make

EUROPE: COAL AND IRON.

machinery go. Machinery can make a great many things much faster and more cheaply than men can make them with their hands, so that a great many things are made near the places where coal is mined, and a great many people live there also.

In Italy there is no coal, but north of the Plain of Lombardy are the Alps, and even in summer water comes down the streams from the melting snows. As these streams come down the steep mountain-sides, they can turn wheels and set machinery in motion. This is another use that rivers have. What other uses of rivers do you know? In the Plain of Lombardy, then, great numbers of people live, and Milan, in the centre of the plain, is the largest city in Italy, larger even than Rome.

But people still wish to go to the Indies from the north-west of Europe. Goods may be sent round through the Strait of Gibraltar, but it is more convenient to send some things down the Rhone Valley by train to the great port of Marseilles. People also who are going to the East, cross over France, and join the boat at Marseilles. Now notice that Marseilles is not at the mouth of the Rhone, but a little to one side, for there are no tides in the Mediterranean, and the mouth of the Rhone gets blocked up with the mud and stones which the river brings down, so that there is no good harbour at the mouth of the river.

The Countries.—You have seen where Greece and Italy, Portugal and Spain, Britain and France, Holland, Belgium, and Germany, are. Portugal and Spain form together the peninsula on the south-west; Norway and Sweden form together the peninsula on the north. Portugal is the low land on the west, and smaller than Spain; while Sweden is the low ground on the east, and larger than Norway. Italy and Greece are the peninsulas in the south and south-

east, but Italy now takes in the Plain of Lombardy, and Greece takes in no large plain. Russia is the great plain in the east. Germany is the western end of the plain, along with the Rhine Valley and the highlands between. France is the low ground round Paris and all north of the Pyrenees, along with the Rhone Valley. Holland is the Delta of the Rhine. Belgium is the narrow piece of low-lying ground along the coast between the Rhine Highlands and the sea. But there are three countries we have not yet noticed. The people of Switzerland live in the land between the Jura and the Alps, and in the valleys of the Alps, especially the valleys of the Rhine and Rhone. Turkey includes the Plain of Thrace, with Constantinople at the corner, where people can easily cross over to Asia, and where boats going between the Black Sea and the Mediterranean must pass.

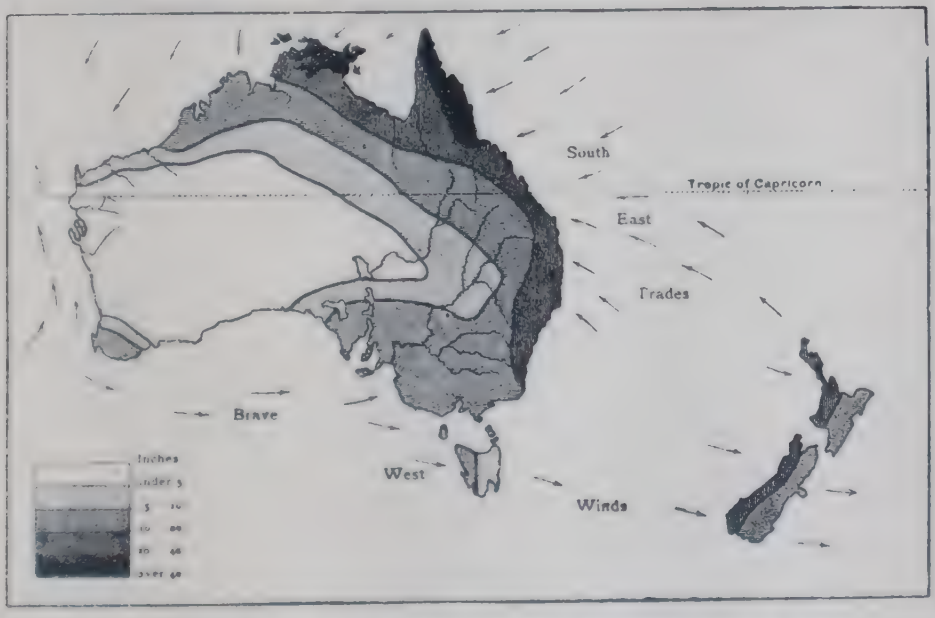
There is still one large kingdom made up of a great number of parts, some of them low ground, some of them high ground. This kingdom is Austria-Hungary. Hungary is the plain with highlands all round ; the rest of the country is Austria. Of what different pieces of high ground and low ground is Austria made? Between the Alps and Carpathians, where it is low ground, through which people naturally go instead of going over high ground, is the capital, Vienna.

South-east of Austria-Hungary are Roumania, Bulgaria, and Servia. Look at the map, and notice whether these are low ground or high ground.

The Great Powers.—You may have heard of the expression, 'The Great Powers,' meaning the important countries of the world. They are Britain, France, Germany, Russia, Austria-Hungary, Italy, the United States, and Japan. They are called Great Powers because the people and rulers of these countries have been able to *do* things. You have learned where these countries are. Now you may think, and say why so many of them are in Europe, though Europe is so small; and why the people of these countries should have been able to do things, and the people of other countries have not been able.

Australia and New Zealand.

Relief.—Where is the low ground in Australia? Where is the high ground? Where is the highest part of the high ground? Where are the largest bays? Why might you expect them to be where

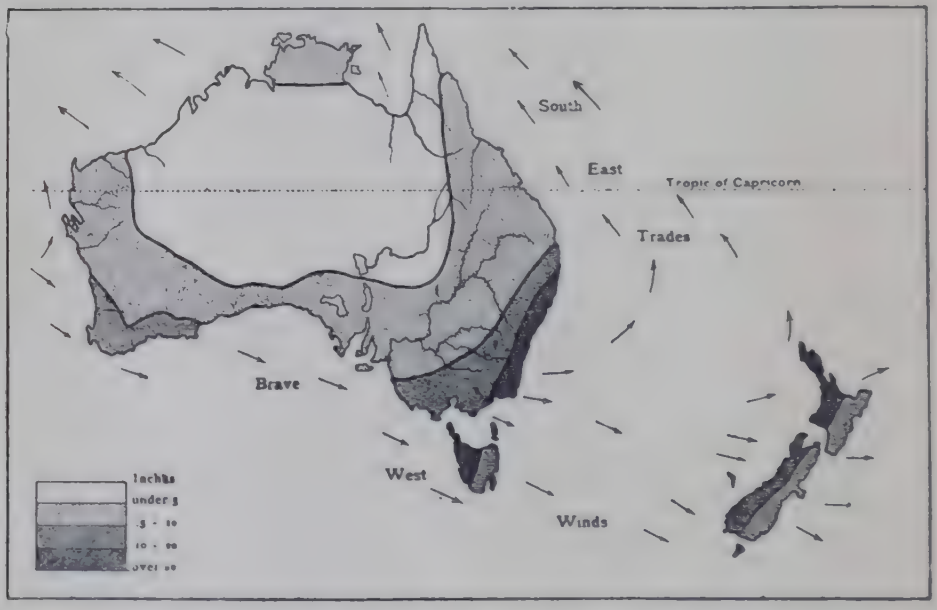


Australia and New Zealand: Winds and Rain, November to April.

they are? Is New Zealand high or low? Which is the highest part?

Winds.—Where is Australia? Is it north or south of the equator? When is it summer? When is it winter? What is the latitude of the south of Australia? What is the latitude of the south of

New Zealand? Where would you expect west winds all the year round? Where would you expect them during a part of the year? Do they blow where you expect them? Where would you expect the trade winds? Do they blow there? Are they the same in summer and winter? Do the winds in the west blow from the land or to the land?

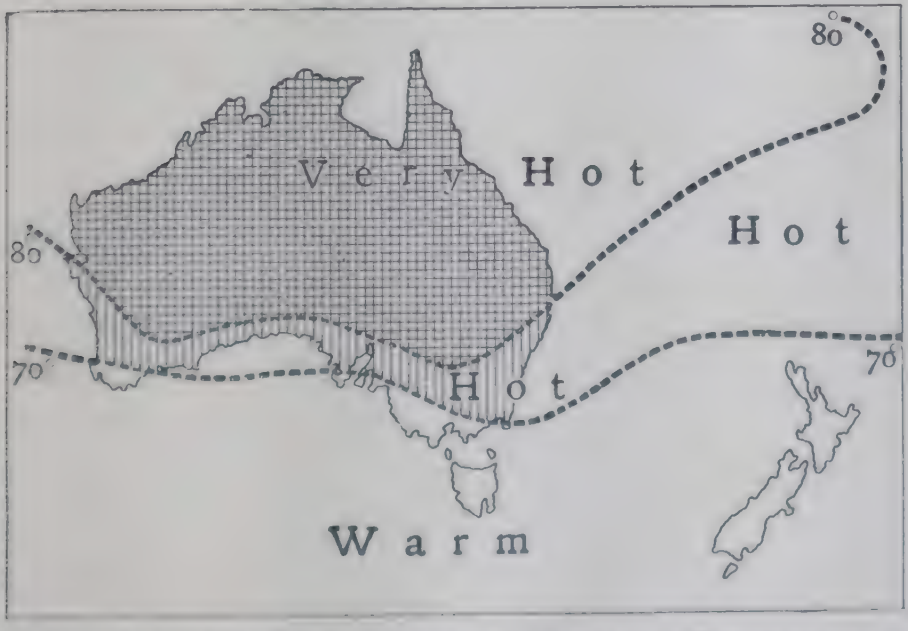


AUSTRALIA AND NEW ZEALAND: WINDS AND RAIN, MAY TO OCTOBER.

Rains.—Would you expect New Zealand to have more rain at one time than another? If so, why? If not, why not? Which is the rainiest part? Why? Which is the rainiest side of Australia? Why? Which is the rainiest side of Tasmania? Why? Where is there least rain in Australia? Why? Why does the rain not go far inland in Australia?

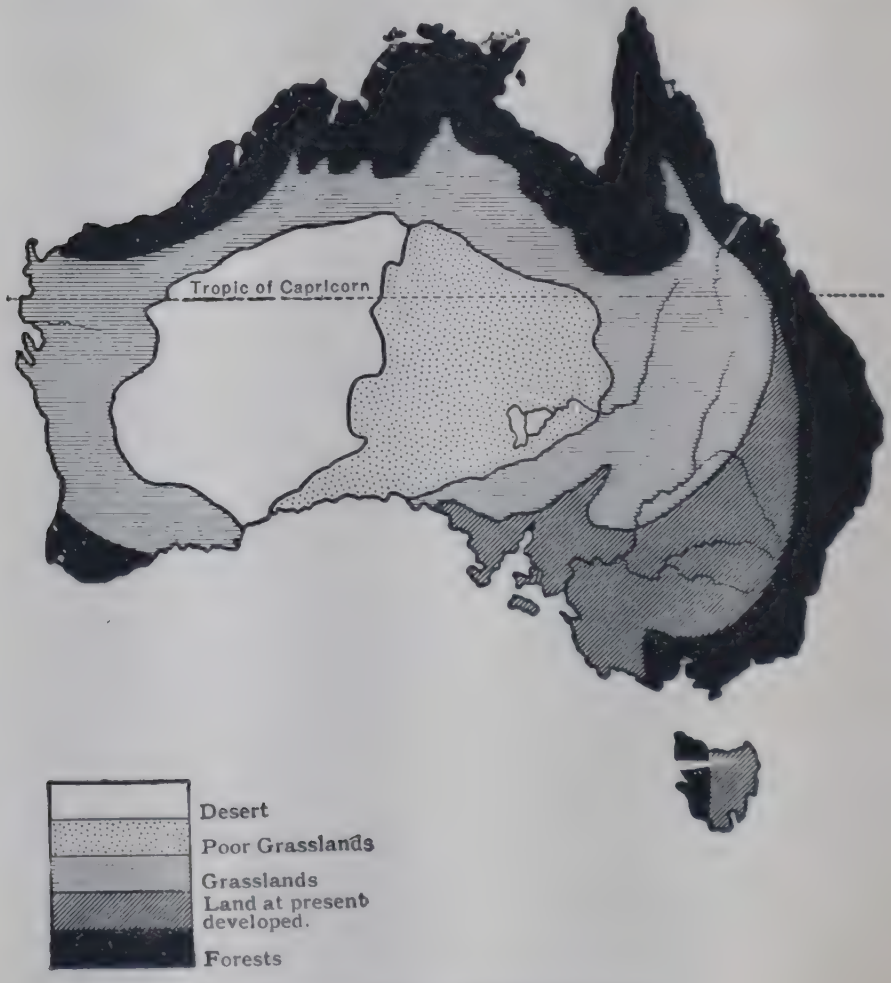
Rivers and Lakes.—Would you expect rivers in

AUSTRALIA AND NEW ZEALAND: JULY TEMPERATURE.



AUSTRALIA AND NEW ZEALAND: JANUARY TEMPERATURE.

the west half of Australia? Where would you expect most rivers in Australia? Are they very long? Do they flow fast or slow? Where would you expect the longest rivers in Australia? When



AUSTRALIA: VEGETATION.

will they have most water? Why? Where are the lakes in Australia?

Temperature.—Is any part of Australia really cold at any time of the year? What part is warmest in summer? What part of Australia is coolest in

summer? What part is coldest in winter? Is New Zealand warm or cold?

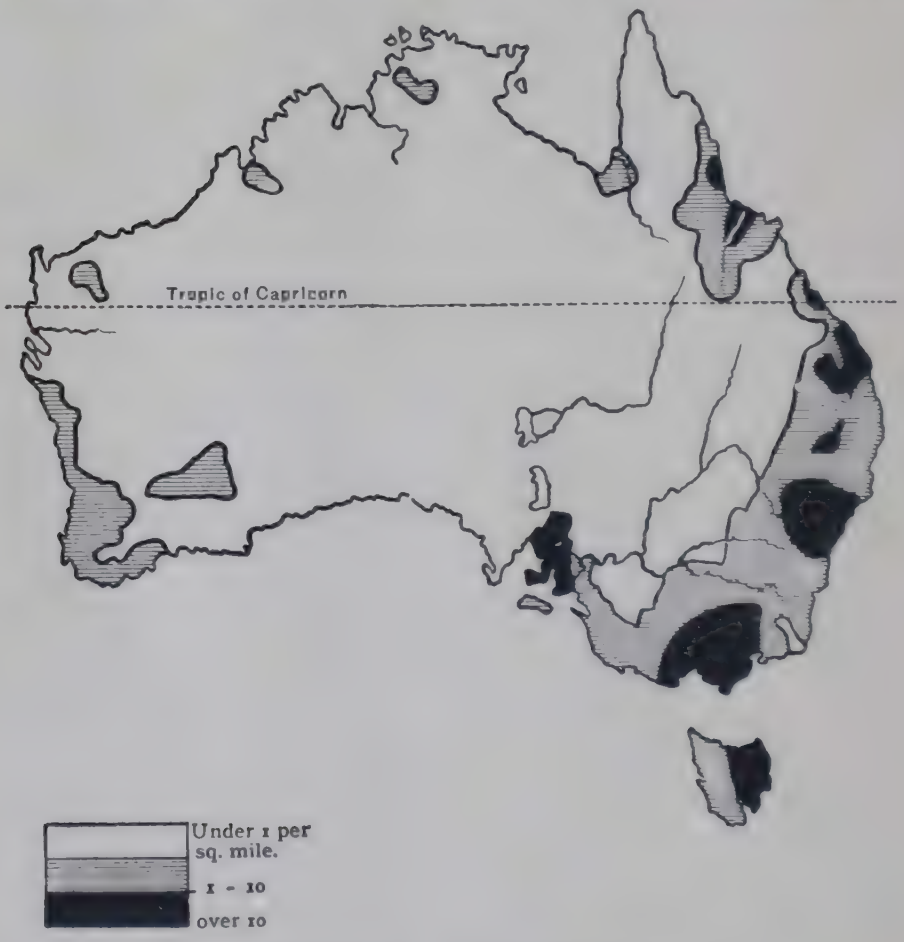
Vegetation.—Where is the desert in Australia? Why is it there? Where is the forest-land in Australia? Why is it there? Where is the forest-land in Tasmania? Where is the forest-land in New

AUSTRALIA: PRODUCTIONS.

Zealand? Where would you expect grass to grow in Australia? Where would you expect grass in New Zealand?

People.—Would you expect many people to live in the west of Australia? To what part of Australia would English people be most likely to go?

Why? Are there many people in Australia? Which are the parts that have the greatest number of



AUSTRALIA: POPULATION.

people living on them? Where would you expect the largest towns? Would you expect them on the coast or inland? What are the largest towns?

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